# INITIAL SUBMITTAL OF THE ADMINISTRATIVE JPMS

# FOR THE CLINTON INITIAL EXAMINATION - JULY/AUG 2002

ES-301

Administrative Topics Outline

Form ES-301-1

Facil	ity: <u>Clinton Power S</u>	tation	Date of Examination: <u>7/29/2002</u>	
Exar	nination Level (circle	e one): <b>RO</b> / SRO	Operating Test Number: <u>ILT0101-1</u>	
Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions		
A.1	Conduct of Operations Procedure Limitations	JPM - Perform PMT sta Attempt, Starts of K/A 2.1.32 Imp 3.4	ntup of SX pump, Fails to Start on First n Second Attempt (faulted)	
	Conduct of Operations Shift Turnover	JPM - Perform a MCR F K/A 2.1.33 Imp 3.4	Panel Walkdown.	
A.2	Equipment Control Tagging and Clearances	JPM - Remove an Annu K/A 2.2.11 Imp 2.5	inciator from Service.	
A.3	Radiation Control Control of Radiation Release	JPM - Respond to a VC Radiation Mode (f K/A 2.3.10 Imp 2.9	Hi Radiation alarm, VC fails to shift to Hi faulted).	
A.4	Emergency Plan Emergency Communications	JPM - Make a Plant Anr Storage Room wit K/A 2.4.43 Imp 2.8	nouncement for FIRE in the Paint and Oil th Area Evacuation.	

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NUREG-1021, Revision 8, Supplement 1



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### JPM NUMBER: RO A.1.a 1

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# 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 through 11 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, or simulator)
- 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues 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 (\*).
  - Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. \_\_\_\_ Date \_\_\_\_
    - Pilot test the JPM:
       a. verify cues both verbal and visual are free of conflict, and
       b. ensure performance time is accurate.
      - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
      - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

 SME/Instructor
 Date

 SME/Instructor
 Date

 SME/Instructor
 Date

# JPM NUMBER: RO A.1.a 1

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# **REVISION: 00**

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

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# JPM NUMBER: RO A.1.a 1

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**REVISION: 00** 

Operator's Name: Job Title: □RO □ SRO	
JPM Title: START OF SX PUMP FOR PMT Number: RO A.1a 1 Revision Number: 00 Task Number and Title: Ability to explain and apply system	n limits and precautions
K/A Number: 2.1.32 Importance:	RO 3.4 SRO 3.8
Suggested Testing Environment: Simulator	
Actual Testing Environment: 🗅 Simulator 🗅 Plant	Control Room
Testing Method: Simulate Alternate Path / Fau Perform	alted: 🔳 Yes 🗅 No
Time Critical: 🖸 Yes 📕 No	
Estimated Time to Complete: <u>10</u> minutes Actual Ti	ime Used: minutes
References: CPS No. 9069.01 R42, SHUTDOWN SERV TEST CPS No. 3211.01 R21d, SHUTDOWN SERV	ICE WATER OPERABILITY /ICE WATER (SX)
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?	🗅 Yes 🖵 No
The operator's performance was evaluated against the stand and has been determined to be:	lards contained in this JPM, Unsatisfactory
Comments:	
	· · · · · · · · · · · · · · · · · · ·
Evaluator's Name:	
Evaluator's Signature:	Date:

#### JPM NUMBER: RO A.1.a 1

# 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.

### SIMULATOR SET-UP CONDITIONS:

- Initialize the simulator IC with the plant in Mode 1. (IC-1)
- Call Up Div 3 ECCS Panel Section and locate SSW Pump 1C.
- Call up IO Menu for SSW Pump Control Switch.
- ACTIVATE: TRUE for SSW Pump 1C SX01PC- AUTO AFT STOP.
- Observe pump outlined in RED and verify by turning the SSW Pump Control Switch to START that it is disabled.
- Open the list of ACTIVE IOs to allow prompt clearing of "SSW Pump 1C SX01PC-AUTO\_AFT TRUE" when cued by the floor examiner.

#### TASK STANDARDS:

- Correctly applied SSW Pump 1C Motor Restart Requirements of CPS No. 3211.01.
- SSW Pump 1C operating.
- Demonstrate use of Core Work Practices.

# TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

#### **PROCEDURAL/REFERENCES:**

CPS No. 3211.01 Shutdown Service Water (SX) CPS No.9069.01 Shutdown Service Water Operability Test

### **EVALUATOR INSTRUCTIONS:**

- Evaluator provide a marked up copy of CPS No. 9069.01
- Amplifying cues are provided within the JPM steps.

#### JPM NUMBER: RO A.1.a 1

#### **INITIAL CONDITIONS AND INITIATING CUE:**

- 1) Examinee is an extra CRO assigned to the MCR to support the resumption of PMT for SSW Pump 1C using CPS No. 9069.01 following the completion of a plant modification.
- 2) The plant is in Mode 1.
- 3) CPS No. 9069.01 is in progress for SSW Pump 1C. The Status of the test that is turned over to you is as follows:
  - a) The SX Pump was started as required by Step 8.5.3 when the System Engineer discovered that a special instrument used to measure starting currents was not properly positioned. And, the Engineer requested that the test be stop and conditions restored to the test procedure prerequisites as delineated in Section 8.6. The pump had operated for approximately 30 minutes.
  - b) Restoration per Section 8.6 has been completed and the steps in Prerequisite Section 5.0 were reverified.
  - c) System Engineer has people stationed to operate stopwatches and to collect the required data of Step 8.5.4. The current measuring instrumentation placement has been verified correct. An M&TE gauge is being used in place of 1FI-SX232 as permitted by Step 5.8.
  - d) The CRS has directed you to recommence the test in accordance with CPS No. 9069.01 Step 8.5 for SSW Pump 1C. It has been 30 minutes since SSW Pump 1C was secured.

START TIME:

#### JPM NUMBER: RO A.1.a 1

#### **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**

#### **8.5 SX DIV 3 OPERABILITY 9069.01**

8.5.1 Verify upper motor oil reservoir oil level for 1SX01PC at mark on sight glass (MS-08 criteria)

Standard	Directs t 1SX01P	he area opera C at mark or	ator to verify upper motor oil reservoir oil level for a sight glass.
CUE	Area operator reports oil level is at the mark on the sight glass.		
Comments	Examinee initials the step.		
	SAT	UNSAT	Comment Number

8.5.2 Place SSW SYS DIV 3 IN TEST switch in TEST.

- 1. Verify SX D3 MOVS IN TEST status light energizes.
- 2. Verify NOT AVAILABLE SSW SYSTEM DIVISION 3 annunciator (5064-2A) alarms, unless already in due to plant conditions.

Standard	SSW SYS DIV 3 IN TEST switch is placed in TEST.		
CUE	System Engineer reports all data takers are ready to gather data.		
Comments	Observe verification of status light engergized and alarm 5064-2A. Examinee initials the step.		
	SAT	UNSAT	Comment Number

#### JPM NUMBER: RO A.1.a 1

8.5.3	Momentarily place ISX01PC control switch to start.
Standard	Momentarily places 1SX01PC control switch to start and verifies failure to start. CRO reports failure to start.
CUE	CRS acknowledges the failure to start and instructs the CRO to suspend testing. Cue simulator operator to delete the "SSW Pump 1C SX01PC-AUTO_AFT TRUE" override from the ACTIVE FILE.
Comments	SAT UNSAT Comment Number

# 6.0 SHUTDOWN SERVICE WATER (SX) 3211.01

SX Pump Motor Restart Requirements: 6.8

- With the windings at ambient temperature, the motor can be started and brought to a) speed two times in succession, coasting to rest between stops.
- With the windings at operating temperature, the motor can be started and brought to b) speed once.
- If the motor has been started once from operating temperature, restart may be c) attempted after the following time constraints. The motor windings can be assumed to have returned to operating temperature after 60 minutes de-energized or after 30 minutes running at operating speed. More frequent starts may cause damage to motor windings. Consult the technical manual or the motor supplier.

Standard \*CRO concludes that failure does NOT count as start for starting duty purposes. (No current flow, no trip light).

CUE

As CRS, direct the pump control switch to after-stop to support troubleshooting.

As CRS, tell examinee that the current measuring instrumentation had intefered with the closing contactor and that has now been corrected. As CRS, cue the examinee to evaluate the failure as to whether the "motor restart limitations" would preclude another start attempt at this time. Verify that simulator operator has cleared the Override on SSW Pump 1C. After the CRO evaluation and verification of Override cleared, as CRS,

direct the examinee to recommence testing by re-attempting the pump start.

Comments

SAT UNSAT Comment Number

# JPM NUMBER: RO A.1.a 1

# 8.5 SX DIV 3 OPERABILITY 9069.01

*8.5.3	Momentarily place 1SX01PC control switch to start.		
Standard	Momentarily places 1SX01PC control switch to start, releases switch and verifies successful start of SSW Pmp Rm 1C.		
CUE	CRS acknowledges successful start. CRS states that Step 8.5.4 is being performed locally by Test Engineer and support staff, and that actual stroke times will be brought to the MCR after the test.		
Comments	Examinee initials step 8.5.3 and leaves 8.5.4 blank.		
	SAT UNSAT Comment Number		
8.5.5	Verify SSW Pmp Rm 1C Sply Fan, 1VH01CC has started (1H13-P-P800).		
Standard	CRO locates and verifies that SSW Pmp Rm 1C Sply Fan, 1VH01CC is operating.		
CUE	Declare this JPM complete.		
Comments	Examinee initials 8.5.5 unless JPM is terminated prior to examinee having an opportunity to initial the step.		
	SAT UNSAT Comment Number		

### **TERMINATING CUES:**

SSW Pump 1SX01PC has been started and the SSW Pump Room 1C Supply Fan, 1VH01CC operation has been verified.

STOP TIME:

# **K/A REFERENCE NUMBERS**

Importance Rating

K/A SYSTEM NUMBER

Generic

 K/A NUMBER
 RO
 SRO

 2.1.32
 3.4
 3.8

#### JPM NUMBER: RO A.1.a 1

#### **REVISION: 00**

#### **INITIATING CUE**

- 1) Examinee is an extra CRO assigned to the MCR to support the resumption of PMT for SSW Pump 1C using CPS No. 9069.01 following the completion of a plant modification.
- 2) The plant is in Mode 1.
- 3) CPS No. 9069.01 is in progress for SSW Pump 1C. The Status of the test that is turned over to you is as follows:
  - a) The SX Pump was started as required by Step 8.5.3 when the System Engineer discovered that a special instrument used to measure starting currents was not properly positioned. And, the Engineer requested that the test be stop and conditions restored to the test procedure prerequisites as delineated in Section 8.6. The pump had operated for approximately 30 minutes.
  - b) Restoration per Section 8.6 has been completed and the steps in Prerequisite Section 5.0 were reverified.
  - c) System Engineer has people stationed to operate stopwatches and to collect the required data of Step 8.5.4. The current measuring instrumentation placement has been verified correct. An M&TE gauge is being used in place of 1FI-SX232 as permitted by Step 5.8.
  - d) The CRS has directed you to recommence the test in accordance with CPS No. 9069.01 Step 8.5 for SSW Pump 1C. It has been 30 minutes since SSW Pump 1C was secured.



CPS 9069.01

# SHUTDOWN SERVICE WATER OPERABILITY TEST

# SCOPE OF REVISION:

- Major revision rev marks not used, technical content not changed.
- Periodic review and format update per CPS 1005.00/01/02 criteria, including incorporation of Specific Rev. 41a.
- RF-6/7 Operations/Procedures Self-Assessment item: Inconsistency in similar surveillance's - updated for consistency in level of detail, layout, and application.
- 5.8: Action to place Flow Test Inst in-service deferred to actual point of use to minimize Confined Space Entries (ATI 00401559-12-04).
- 9.0: ISI acceptance criteria text enhanced per CR1-99-09-064 resolution using approved text changes found in similar procedures.



ORIGINATOR: Thomas J. Landin

ITR: Ken Sheffield

CLASS CODE: SNNI

APPROVAL DATE: May 25 2001

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CURRENT CHANGES TO G	ENERAL DEVISION	the second s	
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CPS 9069.01 1.0 PURPOSE Verify operability of Shutdown Service Water (SX) System Pumps, 1SX01PA (B) & [C], and selected valves per: Pump Test: ISI Appendix XI, Table I (3 month) Exercise: ISI Appendix XI, Table II (3 month) Stroke Time (Exercise, Loss of Power): ISI Appendix XI, Table II (3 month) Position Indication: ISI Appendix XI, Table II (2 years) ORM TR 4.5.2.2 MOV Thermal O/L Protection Byp 2.0 DISCUSSION/DEFINITIONS 2.1 Discussion 2.1.1Frequency «LBD-1, LBD-2, LBD-3» Normal Frequency 1) Quarterly 2) Position Indication - 2 years Other Triggers -1) Prior to returning a valve to service after maintenance, repair, or replacement work is performed on the valve or its associated actuator, control or power circuit. Prior to returning a pump to service after maintenance, repair or replacement work is performed on the pump or its motor. This surveillance strokes and/or exercises: 1SX010A(B)[C], SX Pump A(B)[C] Room Area Cooler Outlet ISX014A(B)[C], PSW To SSW 1A(1B)[1C] Hdr Isol Vlv 1SX063A(B), SX Pmp Min Flow DG 1A(B) Hx Outlet Vlv ISX013D(E), SSW Strainer 1A(B) Backwash Valve [timed in the OPEN direction only new minimum flow valves for 1SX01PA(B)] ISX006C, DG 1C Hx Outlet Valve ISX001A(B)[C], 1SX01PA(B)[C] Disch Check Vlv This procedure partially satisfies OPEN exercise, and fully satisfies CLOSED function of the Pump Discharge Check Valves. 1SX013F, SSW Strainer 1C Backwash Valve (timed in both directions) ISX001A(B)[C], 1SX01PA(B)[C] Discharge Check Valves 42

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CPS 9069.01

## DISCUSSION/DEFINITIONS (cont'd)

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- 2.1.3 ISI vibration readings shall be taken at each marked ISI unique point designation (VM1, HM1, AM1).
- 2.1.4 Pump operating parameters shall be stabilized for at least 2 minutes before recording data.
- 2.1.5 The ISI Loss of Power Test requirements are satisfied for valve 1SX010A(B)[C] by verifying that the valve opens when the fan is started.
- 2.1.6 Position indication testing is satisfied with an operator at the valve to verify actual valve position against remote indication, except where noted otherwise.
  - Individual sections or an individual step or individual steps within a section of this procedure may be performed independently for PMT or other maintenance activities.

Those steps within a section that are not performed should be marked N/A.

When only parts of a section are performed, it is the responsibility of the SMngt and the performer to ensure that all necessary prerequisites, precautions and limitations are met for those steps that will be performed.

Additionally, the impact of NOT performing the remaining steps must also be understood.

This procedure may be used to establish the required valve positions for performance of CPS 9381.01, MOV Thermal Overload Bypass Verification.

# 2.2 **Definitions**

- 2.2.1 <u>Cycle</u> For a value that is closed, take the value to the full open position and then return the value to its full closed position. For a value that is open, take the value to the full closed position and then return the value to its full open position.
- 2.2.2 <u>Stroke Time</u> Control switch actuation to receipt of the desired position indication (unless otherwise specified within procedure).
- 2.2.3 MSL Mean Sea Level
- 2.2.4 <u>Continuous Throttling</u> The state of a valve such that it is stopped (not moving) in a position other than full open or full closed.
- 2.2.5 <u>Suction Lift</u> Suction lift is the calculated suction value determined by subtracting the actual Lake Level from the Elevation at the center-line of the SX PUMP suction gauges and multiplying this result times a constant (0.43).

Initial

#### RESPONSIBILITY

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Operations Department Head shall be responsible for the implementation of this procedure.

#### PRECAUTIONS

It may be desirable, periodically during long pump runs, to perform a backwash per CPS 3211.01, Shutdown Service Water (SX), Section "Strainer Manual Backwash" as the 7 hour timer has been removed from the circuit.

Backwash activity should be avoided during actual pump flow test as drain flow bypasses the venturi flow element.

Prior to performing SX system recovery action steps in section 8.2 or 8.4:

Due to the system pressure drops which occur during test recovery resulting in equipment tripping, WS/SX operational loads (e.g., MCR HVAC system chiller, VP chiller) should be removed from the division being recovered by either switching the loads to the division not being tested, or by securing the loads not needed to support plant conditions.

#### PREREQUISITES

In conjunction with the SMngt, review the following impact statements to determine required plant status to perform this test:

**OPERABILITY IMPACT:** 

ITS LCO 3.7.1/2: SX Operability

ORM OR 2.5.2: MOV Thermal Overload Protection

#### SYSTEM IMPACT:

Affected Annunciators and Computer Points

5064-8G(5085-8B): RHR A(B) OUT OF SERVICE

5064-2C(5065-2F)[5064-2A]: NOT AVAILABLE SSW SYSTEM DIV 1(2)[3]

<u>RPS Trip</u>: N/A CRVICS Isolation: N/A

Other Systems Affected: WS/SX loads (e.g., MCR HVAC system chiller, VP chiller) - see Precaution 4.2.

REQUIRED OPERABLE CHANNELS: N/A

PLANT/SYSTEM CONDITIONS

REQUIRED TO CONDUCT THIS TEST: N/A

COINCIDENT CHANNELS THAT PREVENT ACTUATION: N/A

Impact Matrix discussed.

Performer

SMngt

CPS 9069.01 5.0 PREREQUISITES (cont'd) Initial 5.2 Obtain SMngt permission to perform this procedure. Date SMnat 5.3 Check the calibration due date of test equipment to be used to ensure that calibration is up-to-date. Verify SX System being tested is in STANDBY: 5.4 Verify open 1SX014A(B)([C] 1. PSW To SSW 1A(BY[C] IsoI Vlv. 2. Verify 1SX01PA(B)([C]) control switch in AUTO. 5.5 Establish communications between the persons performing this surveillance. 5.6 Ensure 1WS067A(B), DW Chiller Hx A(B) TRV Bypass can be placed in-service [Div 1(2) tests only]. 5.7 Verify Confined Space Entry Permit authorized for entry to SX pipe tunnel. 5.8 1FI-SX230(231)[232], SX HDR 1A(1B) [1C] are placed in-service in Steps 8.1.9.5(8.3.9.5)[8.5.12]. Due to silting problems, request I&C support to perform valve manipulations using CPS 8801.12, Local Mounted Instrument Valve Operation And Venting, and copiously vent high and low side instrument lines with equalizing valve open. I&C IF Flow instrument above is not available, THEN An equivalent M&TE gauge shall be installed & placed in service per an AR. The AR number and M&TE data shall be recorded in the remarks section. Any subsequent steps referring to the flow instrument from step 5.8 should be performed using the temp installed gauge and jobsteps of the AR with which it was installed. 5 of 31 Page Rev. 42

CPS 9069.01

Initial

# LIMITATIONS

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An automatic initiation of SX occurs, «LBD-1» 1. Terminate the performance of this procedure. THEN

2. Return all SX MOV TEST PREP switches to NORMAL

3. Return all valves currently under test to the pretest position unless required to be open.

Motor operated valves (MOV's) that have been cycled full stroke (open to close to open, etc.) 3 consecutive times should have a 15 minute cooling off period. This will prevent motor degradation

caused by overheating.

### MATERIALS/TEST EQUIPMENT

(Record) Stopwatch (3) [Range: 0 - 40 min, Accuracy: ± 0.10 sec/40 min, Minor Divisions: N/A; or equivalent stopwatch.]

(Record) Vibration meter and sensor(s) [Range: 4.5hz - 1000hz, Accuracy: ± 5%, Minor Divisions: N/A; or equivalent meter/sensor.] P

Equipment shall not be tested unless it is listed on the vibration meter instrument menu.

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CPS 9069.01 8.1 SX DIV 1 OPERABILITY (cont'd) Initial 8.1.6 Timing 1SX014A/1SX063A/1SX013D (Record) Time shut 1SX014A, PSW To SSW 1A Hdr Isol VIV. 2. Record) Time open 1SX063A, SX Pmp Min Flow DG 1A Hx Outlet Vlv. NOTE SSW Strainer 1A Basket Motor (1SX021FA) no longer starts with pump start. Basket motor initiates on  $\Delta P$  only. 1SX013D is timed from local position indicator instead of MCC bucket to ensure valve travels full stroke. З. (Record) Time open 1SX013D, SSW Strainer 1A Backwash Valve. 8.1.7 Verify SSW Pmp Rm 1A Sply\Fan, 1VH01CA has started (1H13-P801). NOTE 1SX010A may be stroked by placing handswitch for 1VHQICA to start. See section 8.7. 8.1.8 (Local) Perform the following: 1. By observing stem movement: (Record) Time open 1SX010A, SX Outlet SX Pump Rm 1A EAC Vlv. 2. Verify a stream of water issuing from the stuffing box leak-off at the motor base. (~ a pencil sized stream of water or larger) Proper leakoff is essential to ensure cooling of the packing. An AR should be generated if leakoff is smaller than described or absent.

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Initial

SX DIV 1 OPERABILITY

(cont'd)

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# NOTE

Required flow shall be established by:

Placing flow through RHR 1A Hx,

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verifying 1SX063A, SX Pmp Min Flow DG 1A Hx Outlet Vlv is open, and by continuously throttling flow through DW Chiller Heat Exchanger A (1VP04CA) as needed.

# 8.1.9 **1SXQ1PA Pump Operability-Pump Flow Setup**

Shut ISX082A, RHR A Hx MU Cond Inlet Vlv.

### NOTE

If the RHR Hx is not being used for SDC or Suppression Pool Cooling, (i.e. no load on the shell side of the heat exchanger), then the tube side and shell side temperatures are allowed to decrease to  $32 \,\text{F}$ .  $\ll CM-3 \gg$ 

Place/verify flow through RHR Hx 1A

with the following valve arrangement:

1) 1E12-FO14AV SSW Inlet RHR A Hx Valve OPEN

2) 1E12-F0 & A, RHR Hx A SSW Outlet Valve OPEN

# NOTE

1SX013D is required to be closed for the Pump Operability test as this flow bypasses the flow venturi. The following step requires declaring a short term LCO for inoperative 1SX013D.

- 3. At SSW MCC 1A-1D, place 1SX013D breaker to QFF.
- 4. Manually shut 1SX013D by engaging manual hand lever and turning handwheel.
- 5. With flow established though RHR Hx 1A and 1SX063A, SX Pmp Min Flow DG 1A Hx Outlet Vlv, Place 1FI-SX230, SX Hdr 1A Flow Test Inst in-service as follows: (refer to 5.8 also)
  - This step is performed at this point to coordinate flow measuring steps and prevent over-ranging gage. Total system flow is expected to be ~ 9,500 - 11,000 gpm at this point.
  - 1) Slowly open 1FI-SX230LSI.
  - 2) Slowly open 1FI-SX230HSI.
  - 3) Slowly shut 1FI-SX230EV.
  - If required, continuously throttle using 1WS067A DW Chiller Hx A TRV Bypass as necessary to obtain flow of  $\geq$  30" H<sub>2</sub>0 as indicated on 1FI-SX230.

CPS 9069.01

# SX DIV 1 OPERABILITY (cont'd)

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## Initial

(Record) After the pump has run for a minimum of 2 minutes, and conditions have stabilized, record:

1.  $\langle$  Flow (in. H<sub>2</sub>0) indicated on 1FI-SX230.

Flow in the acceptable range (29.75 to 30.25" H<sub>2</sub>0) satisfies "partial" open exercise for 1SX001A, Discharge Check Valve. «CM-1»

Obtain 1SX01PA vibration (VM1, HM1, AM1) readings at each specifically marked cable [preferred](bottom of the motor) or marked location [alternate](near upper motor bearing).

# NOTE

If desired, to save a trip into SX pipe tunnel later, 1FI-SX230 may be isolated at this time per step 8.2.2 or wait until restoration section.

8.1.11

8.1.12

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8.1.10

(Record) Record SX Pump 1A discharge pressure from locally mounted pressure indicator, 1PI-SX016.

Contact Security to gain access to the Clinton Lake level indicator.

NOTE

(Record) Record screenhouse lake level indication.

(Calculate) After data collection is completed, calculate and record following values:

This step may be deferred while recovering,

but final acceptance results will not be available until the calculations are completed.

Pump Flow.

1.

2. Suction Lift Pressure.

3. Pump Differential Pressure.



#### CPS 9069.01

Initial

IV /

TEST RECOVERY 'A' PUMP (cont'd)

# 8.2.4

8.2

Place & hold 1SX014A control switch to OPEN. Immediately place & hold 1SX01PA C/S to STOP. When the valve indicates open, release the pump & valve C/S's.

- Werify SSW Pmp Rm 1A Sply Fan, 1. 1001CA stops (1H13-P801).
- 2. (Lodal) Verify shut 1SX010A, SX Outlet SX Pump Rm 1A EAC Vlv.
- (Local) Verify 1SX013D stroked closed. 3.
- If not being used to support DG run or cooldown, 4. Shut 1SX063A.

#### NOTE

Following steps allows restoring from short term LCO for inoperative ISX013D.

- (Local) Place Back Ash Control Switch to START. 5.
  - Time open USX013D. (Record) SSW Strainer 1A Backwash Valve.
- (Local) Place Backwash Control Switch to AUTO. 7.
- 8. (Local) Verify 1SX013D stroked closed.

#### 8.2.5

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#### 1SX014A did not open, THEN? IF

At SSW MCC 1A-2A, open 1SX014A valve breaker.

2. Open 1SX014A manually until the pressure between SX & WS is equalized; not to exceed 25% open while initially pressurizing.

IF

Unable to approach WS system pressure, THEN

Manually open 1SX014A no more than 50% to reach desired pressure.

Place and hold 1SX014A control switch in OPEN. 3. Place and hold 1SX01PA control switch in STOP. 4. 5. At SSW MCC 1A-2A, close 1SX014A valve breaker 6.

- When 1SX014A indicates open,
  - 1) Release 1SX014A control switch.
  - Release 1SX01PA control switch. 2)

. 82	CPS <u>9069.01</u>
	<u>Initial</u> (cont'd) <u>Initial</u>
	Verify 1SX01PA check valve, 1SX001A shuts by observing the following:
	1. Annunciator 5041-4E, AUTO START PSW PUMP does <u>not</u> annunciate. <b>IV</b> /
	2. Annunciator 5041-3F, LOW PRESS PSW STRAINER DISCHARGE HEADER does <u>not</u> alarm. <b>IV</b> /
	3. 1SX01PA does <u>not</u> auto-restart.
	4. (LOCAL) Verify no backflow can be heard going into 1SX01PA.
8.2.7	IF Flow through the BHB HX 1A is secured
	THEN Perform RHR A Hx MC Layup per CPS 3211.01, Shutdown Service Water (SX).
	Refer to CPS 3312 01, Residual Heat Removal (RHR) Limitation 6.1 for RHR 14 HX MC Layup criteria.
8.2.8	SX MOV Test Prep Switch restoration «LBD-1»
	Place SSW DIV 1 MOV TEST PRRP switch in NORM. IV 1. Verify SX D1 MOVS IN TEST status light deenergizes.
	2. Verify NOT AVAILABLE SSW SYSTEM DIV 1 annunciator 5064-2C clears, or remains illuminated due to plant conditions.
8.2.9	RHR & Test Drop Cruiter
	Diana DUD 2 Nov
	1. Verify RHR A MOV IN TEST
	status light deenergizes.
	<ol> <li>Verify RHR A OUT OF SERVICE annunciator 5064-8G clears, or remains illuminated due to plant conditions.</li> </ol>
8 2 10	
0.2.10	return WS/SX operating loads shifted or secured in steps 8.1.2/8.2.1 back to Div 1.
8 2 11	
0.2.11	operability test is complete.
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Initial

SX DIV 2 OPERABILITY

8.3.1

8.3

Verify upper motor oil reservoir oil level for 1SX01PB at mark on sight glass (MS-08 criteria).

8.3.2

8.3.5

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THEN

IF

Desired (optional, not required until 8.4.1), For the Division 2 WS/SX operational loads (e.g., MCR HVAC system chiller, VP chiller):

. Switch the WS/SX loads to Division 1,

OR

2. Secure the Division 2 loads not needed to support plant conditions.

8.3.3 Place SSW DIV 2 MOV TEST PREP switch in TEST.

- 1. Verify SX D2 MOVS IN TEST status light energizes.
- 2. Verify NOT AVAILABLE SSW SYSTEM DIVISION 2 annunciator (5064-25) alarms, unless already in due to plant conditions.

8.3.4 Place RHR B MOV TEST PREP switch in TEST.

- 1. Verify RHR B MOVS IN TEST status light energizes
- Verify RHR B OUT OF SERVICE annunciator (5065-8B) alarms, unless already in due to plant conditions.

# NOTE

Two new minimum flow valves are provided to ensure minimum pump flow: 1SX013E, SSW Strainer 1B Backwash Valve and 1SX063B, SX Pmp Min Flow DG 1B Hx Outlet VIv.

Stopwatches are required prior to step 8.3.6.

Start timing 1SX063B, 1SX013E & 1SX014B when 1SX01PB control switch is placed to start.

Timing of 1SX013E: Since there is no position indication in the Control Room of 1SX013E, an operator is required to be stationed locally at the valve to time the valve from time of pump start to full open position of 1SX013E.

Momentarily place 1SX01PB control switch to START



is smaller than described or absent.

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Initial

#### NOTE

Required flow shall be established by:

Placing flow through RHR 1B Hx,

1.

verifying ISX063B, SX Pmp Min Flow DG 1B Hx Outlet Vlv is open, and by continuously throttling flow through DW Chiller Heat Exchanger  $\overline{B}$  (1VP04CB) as needed.

8.3.9

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8.3

# 1SX01PB Pump Operability-Pump Flow Setup

Shut 1SX082B, RHR B Hx MU Cond Inlet Vlv.

### <u>NOTE</u>

If the RHR HX is not being used for SDC or Suppression Pool Cooling, (i.e. no load on the shell side of the heat exchanger), then the tube side and shell side temperatures are allowed to decrease to  $32 \, \text{F}$ .  $\ll \text{CM}-3 \gg$ 

 Place/verify flow through RHR Hx 1B with the following valve arrangement:

1) 1E12-F0 $\sqrt{4B}$ , SSW Inlet RHR B Hx Valve OPEN

2) 1E12-F06 B, RHR Hx B SSW Outlet Valve OPEN

# NOTE

1SX013E is required to be closed for the Pump Operability test as this flow bypasses the flow venturi. The following step requires declaring a short term LCO for inoperative JSX013E.

3. At SSW MCC 1B-1D, place 1SX013E breaker to OFF.

CV /

- 4. Manually shut 1SX013E by engaging manual hand lever and turning handwheel.
- 5. With flow established though RHR Hx 1B and 1SX063B, SX Pmp Min Flow DG 1B Hx Outlet Vlv,

Place 1FI-SX231, SX Hdr 1B Flow Test Inst in-service as follows: (refer to 5.8 also)

- This step is performed at this point to coordinate flow measuring steps and prevent over-ranging gage. Total system flow is expected to be ~ 9,500 - 11,000 gpm at this point.
- 1) Slowly open 1FI-SX231LSI.
- Slowly open 1FI-SX231HSI.
- 3) Slowly shut 1FI-SX231EV.
- 6. If required, continuously throttle using 1WS067B, DW Chiller Hx B TRV Bypass as necessary to obtain a flow of ≥ 30" H<sub>2</sub>0 as indicated on 1FI-SX231.

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8.4 TEST RECOVERY 'B' PUMP Initial 8.4.1 Due to the system pressure drops which occur during test recovery resulting in equipment tripping: IF Not already performed in step 8.3.2, THEN For the Division 2 WS/SX operational loads (e.g., MCR HVAC system chiller, VP chiller): Switch the WS/SX loads to Division 1, OR Secure the Division 2 loads not 2. needed to support plant conditions. 8.4.2 Remove 1FI-SX234, SX Hdr 1B Flow Test Inst from service as \follows: Slowly shut 1 TI-SX231HSI. 1. IV / Slowly shut 1FA-SX231LSI. 2. IV Slowly open 1FI-\$X231EV. 3. IV Return the following to 8.4.3 the Are-test position: Return 1WS067B, DX chiller Hx B TRV Bypass 1. to pretest position. IV / NOT This is a plug valve, do not attempt to backseat. Manually open 1SX013E. 2. Place SSW MCC 1B-1D 1SX013E bkr to ON. 1) IV / Verify 1SX013E remains OPEN. 2) 3) IF Not being used for Shutdown Cooling, Isolate flow through RHR Max 1B: THEN a) Shut 1E12-F068B, RHR Hx B SSW Outlet Valve. Wait ~ 15 - 20 seconds after initiating b) close signal for 1E12-F068B, Then shut 1E12-F014B, SSW Inlet RHR 1B Hx Valve. 4) Div 2 DG is in service or IF being cooled down, Wait for the activity to complete THEN prior to commencing the following step.

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9069.01 CPS 8.4 TEST RECOVERY 'B' PUMP (cont'd) Initial 8.4.4 Place & hold 1SX014B control switch to OPEN. Ammediately place & hold 1SX01PB C/S to STOP. When the valve indicates open, release the pump & valve C/S's. IV / Verify SSW Pmp Rm 1B Sply Fan, 1. IVHQICB stops (1H13-P801). 2. (Local) Verify shut 1SX010B, SX Outlet SX Pump Rm 1B EAC Vlv. З. (Local) Verity 1SX013E stroked closed. If ndt ind used to support DG run or cooldown, 4. Shut ISX063B NOTE Following steps allows restoring from short term LCO for inoperative 1SX013E. (Local) Place Backwash Control Switch to START. 5. 6. (Record) Time open 1SX013E, SSW Strainer \B Backwash Valve. 7. (Local) Place Backwash Control Switch to AUTO. (Local) Verify 1SX013E stroked closed. 8. 8.4.5 1SX014B did not open, THEN: IF At SSW MCC 1B-2A, open 1SX014B valve breaker. 1 Open 1SX014B manually until the pressure 2. between SX & WS is equalized; not exceed 25% open while initially preseurizing. Unable to approach WS system pressure, IF THEN Manually open 1SX014B no more than 50% to reach desired pressure. Place and hold 1SX014B control switch in OREN. 3. Place and hold 1SX01PB control switch in STOP. 4. At SSW MCC 1B-2A, close 1SX014B valve breaker. 5. When 1SX014B indicates open, 6. Release 1SX014B control switch. 1) Release 1SX01PB control switch. 2) Rev. 42

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	CPS 9069.01	
8.4	TEST RECOVERY 'B' PUMP (cont'd)	Initial
( 8.4.6	Verify 1SX01PB check valve, 1SX001B shuts by observing the following:	
	1. Annunciator 5041-4E, AUTO START PSW PUMP does not annunciate.	IV /
	2. Annunciator 5041-3F, LOW PRESS PSW STRAINER DISCHARGE HEADER does <u>not</u> alarm.	 IV /
	3. 1SX01PB does <u>not</u> auto-restart.	IV /
	4. (Local) Verify no backflow can be heard going into 1SX01PB.	
8.4.7	IF Flow through the RHR HX 1B is secured	
	THEN Perform RHR B Hx MC Layup per CPS 3211.01 Shutdown Service Water (SX).	L,
	Refer to CPS 3312.01, Residual Heat Removal ( Limitation 6.1 for RNR 1B HX MC Layup criteri	(RHR) .a.
8.4.8	SX MOV Test Prep Switch restoration «LBD-1»	
	Place SSW DIV 2 MOV TEST PREP switch in NORM.	IV /
	<ol> <li>Verify SX D2 MOVS IN TEST status light deenergizes.</li> </ol>	
	<ol> <li>Verify NOT AVAILABLE SSW SYSTEM DIV 2 annunciator 5065-2F clears, or remains illuminated due to plant conditions.</li> </ol>	
8.4.9	RHR B Test Prep Switch restoration	
	Place RHR B MOV TEST PREP switch in NORM.	τν /
Tana (a sa pangang pan Pangang pangang pangang Pangang pangang pangang Pangang pangang	1. Verify RHR B MOV IN TEST status light deenergizes.	
	<ol> <li>Verify RHR B OUT OF SERVICE annunciator 5065-8B clears, or remains illuminated due to plant conditions.</li> </ol>	
8.4.10	As directed by the SMngt, return WS/SX operating loads shifted or secured in steps 8.3.2/8.4.1 back to Div 2.	
8.4.11	Notify SMngt that the SX 'B' pump/valve operability test is complete. // Date Time	

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Initial

# 8.5 <u>SX DIV 3 OPERABILITY</u>

- 8.5.1 Verify upper motor oil reservoir oil level for ISXOIPC at mark on sight glass (MS-08 criteria).
- 8.5.2 Place SSW SYS DIV 3 IN TEST switch in TEST.
  - 1. Verify SX D3 MOVS IN TEST status light energizes.
  - Verify NOT AVAILABLE SSW SYSTEM DIVISION 3 annunciator (5064-2A) alarms, unless already in due to plant conditions.

### NOTE

Stopwatches are required prior to step 8.5.3.

Start timing ISX006C, ISX010C & ISX014C when ISX01PC control switch is placed to start.

- 8.5.3 Momentarily place 1SX01PC control switch to START.
- 8.5.4 <u>Timing 1SX006C/1SX014C</u>

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- ISX014C shut position for stroke timing may be obtained locally (EE-01-016)
- 1. (Record) Time shut 1SX014C, PSW To SSW 1C Hdr Isol Vlv. //ore)
- 2. (Record) Time open 1SX006C, DG 1C Hx Outlet Vlv.
- 8.5.5 Verify SSW Pmp Rm 1C Sply Fan, 1VH01CC has started (1H13-P800).

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Initial

SX DIV 3 OPERABILITY (cont'd)

#### NOTE

1SX010C may be stroked by placing handswitch for 1VH01CC to start. See section 8.7.

8.5.6 (Local) Perform the following:

 (Record) By observing stem movement: Time open 1SX010C, SX Outlet SX Pump Rm 1C EAC Vlv.

- Verify a stream of water issuing from the stuffing box leak-off at the motor base. (~ a pencil sized stream of water or larger)
  - Proper leakoff is essential to ensure cooling of the packing.
    - An AR should be generated if leakoff is smaller than described or absent.

#### NOTE

Step 8.5.7 opens 1SX041A, SX Outlet HPCS Pump Rm EAC 1A. Step 8.5.8 opens 1SX041B, SX Outlet HPCS Pump Rm EAC 1B.

8.5.7 Start HPCS Pmp Rm Sply Fan, 1VY08CA.

- 8.5.8 Start HPCS Pmp Rm Sply Fan, 1VY08CB.
- 8.5.9 Verify the 7 hour strainer flush timer running on SSW MCC 1C-1B (1AP31E) (i.e., light on and timer timing out). «CM-2»

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8.5

9069.01 CPS 8.5 SX DIV 3 OPERABILITY (cont'd) Initial NOTE The right set of lights on SSW MCC 1C compartment 1B are for 1SX013F, and the left set of lights are for the strainer motor. 8.5.10 At SSW MCC 1C-1B, Place SX Str 1C Motor Control Switch to START, Then release switch and let return to AUTO. 1. Verify that the basket motor starts, and (Record) Time open the SX Str 1C Flush Vlv (1F), 2. 1SX013F from (green light on - red light off) to: (red light on - green light off) using 1SX013F indication on SSW MCC 1C-1B. 3. Verify two minute timer running. (i.e., light on and timer timing out) «CM-2» 8.5.11 At SSW MCC 1C-1B, Place SX Str 1C Motor Control Switch to STOP. Verify that the basket motor stops, and 1. 2. (Record) Time shut the SX Str 1C Flush Vlv (1F), 1SX013F from (red light on - green light off) to: (green light on - red light off) using 1SX013F indication on SSW MCC 1C-1B. 3. Verify two minute timer resets. 4. Return SX Str 1C Motor Control Switch to AUTO. «CM-2» IV 8.5.12 Place 1FI-SX232, SX Hdr 1C Flow Test Inst in-service: (refer to 5.8 also) æ This step is performed at this point to coordinate flow measuring steps and prevent over-ranging gage. Total system flow is expected to be ~ 860 gpm at this point. 1. Slowly open 1FI-SX232LSI. 2. Slowly open 1FI-SX232HSI.

3. Slowly shut 1FI-SX232EV.

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# 8.5 **SX DIV 3 OPERABILITY** (cont'd)

- 8.5.13 Unlock and throttle 1SX005C, SX Inlet DG 1C Hx to achieve a flow of ~ 33'' H<sub>2</sub>O as indicated on 1FI-SX232.
- 8.5.14 (Record) After the pump has run for a minimum of 2 minutes, and conditions have stabilized, record:
  - 1. Flow (in.  $H_20$ ) indicated on 1FI-SX232.
    - Flow in the acceptable range (32.5 to 33.5" H<sub>2</sub>0) satisfies "partial" open exercise for 1SX001C, Discharge Check Valve. «CM-1»
  - Obtain 1SX01PC vibration (VM1, HM1, AM1) readings at each specifically marked cable [preferred](bottom of the motor) or marked location [alternate](near upper motor bearing).

#### NOTE

If desired, to save a trip into SX pipe tunnel later, 1FI-SX232 may be isolated at this time per step 8.6.1 or wait until restoration section.

8.5.15 (Record) Record SX Pump 1C discharge pressure from locally mounted pressure indicator, 1PI-SX018.

#### NOTE

Contact Security to gain access to the Clinton Lake level indicator.

- 8.5.16 (Record) Record screenhouse lake level indication.
- 8.5.17

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- (Calculate) After data collection is completed, calculate and record following values:
- This step may be deferred while recovering, but final acceptance results will not be available until the calculations are completed.
- 1. Pump Flow.
- 2. Suction Lift Pressure.
- 3. Pump Differential Pressure.

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8.6	TEST RECOVERY 'C' PUMP (cont'd)	Initial
8.6.6	Shut 1SX006C, DG 1C HX Outlet Valve.	·
8.6.7	Verify 1SX01PC check valve, 1SX001C shuts by observing the following:	
	<ol> <li>Annunciator 5041-4E, AUTO START PSW PUMP does not annunciate.</li> </ol>	<b>v</b> /
	<ol> <li>Annunciator 5041-3F, LOW PRESS PSW STRAINER DISCHARGE HEADER does <u>not</u> alarm.</li> </ol>	.v_ /
	3. 1SX01PC does <u>not</u> auto-restart.	v_ /
	4. (Local) Verify no backflow can be heard going into 1SX01PC.	
8.6.8	SX MOV Test Prep Switch restoration «LBD-1»	
	Place SSW DIV 3 MOV TEST PREP switch in NORM.	v/
	<ol> <li>Verify SX D3 MOVS IN TEST status light deenergizes.</li> </ol>	
	<ol> <li>Verify NOT AVAILABLE SSW SYSTEM DIV 3 annunciator 5064-2A clears, or remains illuminated due to plant conditions.</li> </ol>	
8.6.9	Stop HPCS Pmp Rm Sply Fan, 1VY08CA.	v/
8.6.10	Stop HPCS Pmp Rm Sply Fan, 1VY08CB.	v/
8.6.11	Notify SMngt that the SX 'C' pump/valve operability test is complete. /	

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1A 1B

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Date

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### **NOTE**

This section allows timing of the SX Pump Room Cooler Outlet valves by starting the Room Cooler Fan from its control switch.

This allows the valves to be timed without starting the SX pumps, minimizing wear and tear on the SX pumps.

The method of timing the valves from the time of SX pump start is still available in the respective sections of the procedure and the operator may choose which section to use.

The sections not used may be N/A'd as appropriate.

Valve stroke timing must be accomplished locally at the valve.

# SX SYSTEM AIR OPERATED VALVES OPERABILITY

8.7.1

8.7

- (Record)
- Time open 1SX010A(B)([C]) by: Starting SX Pump Room 1A(1B) Supply Fan, 1VH01CA(B)([C]).
- 8.7.2 Stop SSW Pmp Rm 1A(1B) ([C]) Sply Fan 1VH01CA(B) ([C])

# 8.7.3 Verify 1SX010A(B([C]) shuts.

- 8.7.4 Verify the control switches are in AUTO for:
  - 1. SSW Pmp Rm 1A Sply Fan, 1VH01CA.
  - 2. SSW Pmp Rm 1B Sply Fan, 1VH01CB.
  - 3. SSW Pmp Rm 1C Sply Fan, 1VH01CC.
- 8.7.5 Notify SMngt that the SX air operated valve test is complete.

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### 9.0 ACCEPTANCE CRITERIA

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9.1 OPERABILITY Requirements - Failure to meet the Acceptance Criteria shall constitute a failure to comply with the applicable ITS LCO/ORM OR. ITS/ORM should be immediately reviewed to identify Action Statements needed for implementation. Refer to Supplemental Review Sheet for applicable ITS LCOs/ORM ORs.

# 9.1.1 <u>Power Operated Valves (MOVs, AOVs)</u>

- The valve shall exhibit the required change of disk position. The stroke time shall not exceed the limiting value of full stroke time.
- 2. If the full stroke time is within the acceptance range, Then the test is acceptable.
- 3. If the valve fails to exhibit the required change of disc position, or exceeds the limiting value of full-stroke time, Then the valve shall be immediately declared inoperable.
- 4. If values with measured stroke times do not meet the acceptance range, but are less than the limiting value Then the value shall be immediately retested <u>or</u> declared inoperable.

If the second set of data meets the acceptance range, Then the cause of the initial deviation shall be analyzed and the results documented in the comments/ deficiency section of the data sheet.

5. If the second set of data does not meet the acceptance range, but is less than the limiting value, then the test shall be analyzed by NSED within 96 hours of the test to verify that the new stroke time represents acceptable valve operation or the valve shall be declared inoperable.

The valve may remain operable during the 96 hour analysis period.

6. Deviations in stroke time which can be attributed to factors external to the valve and control system would not INOP the valve. Examples: faulty stop watch, interruptions during test, burned out light bulb.

If the reason for the deviation cannot be determined, Then declare the valve inoperable and initiate corrective action.

7. Analyses provided by Engineering which determine acceptable valve operation shall be documented and a copy attached to the test package.

### 9.1

## OPERABILITY Requirements

#### (cont'd)

9.1.2 <u>Position Indication</u>

Remote position indication is observed to verify that the valve operation (locally) is accurately indicated (at the remote location).

Position indication shall be satisfied with an Operator locally at the valve to verify actual valve movement in the proper direction (or by other positive means) as compared to remote indication.

Unacceptable indication does not INOP the valve provided the disc can be confirmed to be in the tested position.

If the indication is unacceptable,

then initiate corrective actions immediately.

### 9.1.3 Pumps

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- Acceptable Range If the ISI data fall into the Acceptable Range, the test results are acceptable.
- Alert Range <u>If</u> the ISI data fall into the Alert Range, <u>then</u>:
  - The instruments involved may be recalibrated and the test rerun, or
  - 2) The test frequency shall be reduced to 6 weeks until the cause of the deviation is determined and the
  - condition corrected.
- Required Action Range <u>If</u> the ISI data fall into the Required Action Range, <u>then</u>:

The pump shall be declared inoperable immediately, and not returned to service until the cause of the deviation is determined and the condition corrected.

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# 9.1.4 SX MOV Test Prep switches are returned to NORMAL. «LBD-1»

9.2 <u>OTHER Requirements</u> - None

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## 10.0 **FINAL CONDITIONS**

SX system is OPERABLE.

## 11.0 **REFERENCES**

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- 11.1 ITS LCO 3.7.1/2
- 11.2 LBD-1: ORM OR 2.5.2 «6.1, 8.2.8/9, 8.4.8/9, 8.6.8, 9.1.4»
- 11.3 CPS 1887.00, Administration Of In-Service Inspection (ISI) Program Activities
- 11.4 CPS 3211.01, Shutdown Service Water (SX)
- 11.5 CPS 3312.01, Residual Heat Removal (RHR)
- 11.6 CPS 8801.12, Local Mounted Instrument Valve Operation And Venting
- 11.7 CPS 9381.01, MOV Thermal Overload Bypass Device Verification
- 11.8 CM-1: CR1-93-11-068 «8.1.10.1, 8.3.10.1, 8.5.14.1»

11.9 CM-2: CR1-98-03-365 (7 hour Basket Motor timer removed from Div 1/ECN 31405 & Div 2/ECN 31406 «8.5.9, 8.5.10.3, 8.5.11.4»

- 11.10 CM-3: CR1-98-12-274 «NOTEs 8.1.9.2 & 8.3.9.2»
- 12.0 **APPENDICES** None

### 13.0 DOCUMENTS

CPS 9069.01D001, SX System Operability Data Sheet

SHUTDOWN	SERVICE	WATER	OPERAE	ILITY	TEST

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# SUPPLEMENTAL REVIEW SHEET

Operability Requirements:         ITS LCOs:       3.7.1       3.7.2         ORM ORs:       2.5.2         ODCM ORs:       None         As applicable:       Initiated Condition Report No.         Initiated Work Document No.       Initiated Work Document No.         Comments/Deficiencies       More for med safts factorily, Nor required to         More for the formed safts factorily, Nor required to       Initiated Work Document No.         Initiated Work Document No.       Initiated Work Document No.         Comments/Deficiencies       More for required to         More for the formed safts factorily, Nor required to       Initiated Work Document No.         Initiated Work Document No.       Safts factorily, Nor required to         More for the formed safts factorily, Nor required to       Initiated Work Document No.         More for the formed safts factorily, Nor required to       Initiated Work Document No.         Safter Market Safts factorily, Nor required to       Initiated Work Document No.         Safter Market Safts factorily, Nor required to	Corrective Ac	tion Taken	en en se deserve de la sectet de la companya participante de la deserve de la deserve de la deserve de la deser La companya de la comp		
ITS LOOS:       3.7.1       3.7.2         ORM ORS:       2.5.2         ODCM ORS:       None         As applicable:       Initiated Condition Report No.         Initiated Work Document No.	Operability P	oqui romont a.			
Area not not in the second	TTS LCOs	$\cdot$ $271$			
ODCM ORs:       None         As applicable:       Initiated Condition Report No.         Initiated Work Document No.	ORM ORs:	252			
As applicable: Initiated Condition Report No Initiated Work Document No Comments/Deficiencies MOTE: performed_safts factorily, Not required to    	ODCM ORs	: None			
Review and Approval Cognizant Plant Engineer (ISI Pump & Valve) (Signature) (Date) (Date) (Date) (Date)	As applicable	<ul> <li>A state of the sta</li></ul>			
Initiated condition Report No.         Initiated Work Document No.         Comments/Deficiencies         MOTE         Time         Time:         Initiated Work Document No.         Seview and Approval         Cognizant Plant Engineer (ISI Pump & Valve)         Surveillance Coordinator:         (Signature)       (Date)	Thitiste	· d Condition Dor			and the second secon
Comments/Deficiencies	Tnitiate	d Work Document	- No	a a bha an	
Comments/Deficiencies         MTG        Time;         Time;       Satts factorily, Nor required to         Time;       Satts factorily, Nor required to         Surveillance Coordinator:       (Signature)         (Signature)       (Date)		C WOIK DOCUMENT	- NO.		
Review and Approval Cognizant Plant Engineer (ISI Pump & Valve) (Signature) (Date) (Date)	Comments/Defi				
Review and Approval Cognizant Plant Engineer (ISI Pump & Valve) (Signature) (Date) (Date)	Note I	Tim Operan	al a trata to 1	12- 40-41 11	$\mathcal{F}$
Review and Approval Cognizant Plant Engineer (ISI Pump & Valve) (Signature) (Date) Surveillance Coordinator: (Signature) (Date)	Tine.	I my persorm	a sairs aciorily	, Noi required h	<u>0</u>
Review and Approval Cognizant Plant Engineer (ISI Pump & Valve) (Signature) (Date) Surveillance Coordinator: (Signature) (Date)	<u> </u>				
Review and Approval Cognizant Plant Engineer (ISI Pump & Valve) Surveillance Coordinator: (Signature) (Date) (Date)					<u></u>
Review and Approval Cognizant Plant Engineer (ISI Pump & Valve) (Signature) (Date) Surveillance Coordinator:					
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	C	CLINTON POWER STATION	J
anapi <mark>e</mark>		Job Performance Measure	
		JPM Number: RO A.1.b.1	· · ·
		Revision Number: 00	
		Date <sup>.</sup> 4/10/2002	
		Balo. Wrozeoc	
nannan i mortu a sann sann dan dariya (Changa)			4/40/00
	Developed By:	D Antonelli Instructor	 Date
	Validated By:	T Pickley	5/6/02
		SME or Instructor	Date
	Review By:	P. O'Brien	5/10/02
		<b>Operations Representative</b>	Date
	Approved By:	B Price	5/21/02
	Approved by.	Training Department	Date
		-	

NRC SUBMITTAL COPY

JPM NUMBER: RO A.1.b. 1\_\_\_\_

**REVISION:** <u>00</u>

# 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 through 11 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, or simulator)
- 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues are properly identified.
  - 6. Task standards identified and verified by SME review.
    - Critical steps meet the criteria for critical steps and are identified with an asterisk (\*).
      - Verify the procedure referenced by this JPM matches the most current revision of that procedure:
        - Procedure Rev. \_\_\_\_ Date \_\_\_
      - Pilot test the JPM:
         a. verify cues both verbal and visual are free of conflict, and
         b. ensure performance time is accurate.
  - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
    - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/InstructorDateSME/InstructorDate

SME/Instructor

Date

JPM NUMBER: RO A.1.b. 1

# REVISION: 00

# **Revision Record (Summary)**

1. Revision 00, This is a new JPM

Page 3 of 10

	ADMIN JPM
	JPM NUMBER: RO A.1.b. 1 REVISION: 00
1607-071 + 1551 - 53 - 53 - 56 - 57 - 58 - 58 - 58 - 58 - 58 - 58 - 58	Operator's Name: Job Title:
	JPM Title: MCR Panel Walkdown
· · · · · · · ·	JPM Number: RO A.1.b. 1
	Task Number and Title: Ability to recognize abnormal indications for system operating parameters, which are entry-level conditions for technical specifications.
	K/A Number K 2.1.33 Importance 3.4 / 4.0
	Suggested Testing Environment: Simulator
	Actual Testing Environment: 🗅 Simulator 🗅 Plant 🗅 Control Room
	Testing Method:□ Simulate Alternate Path / Faulted: ■ Yes □ No
	Time Critical: 🖸 Yes 📕 No
	Estimated Time to Complete: 15 minutes Actual Time Used: minutes
	References: OP-AA-103-102, WATCHSTANDING PRACTICES Operations MCR Critical Parameter Log Page 1 (On-line)
	<b>EVALUATION SUMMARY:</b> 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
1 June 2	Comments:
	Comments:
	<u>Comments:</u>
	Comments:
	Comments:      Evaluator's Name:   Evaluator's Signature:   Date:
	Comments:
	Comments:

### JPM NUMBER: RO A.1.b. 1

### **REVISION: 00**

### 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.

### SIMULATOR SET-UP CONDITIONS:

- Initialize the simulator to IC-1 Full Power.
- Advance Chart Recorders, Mark the start of simulation and allow charts to run for  $\sim 5$  min.
- Fill in the first 4 hours of a blank "Operations MCR Critical <u>Parameter</u> Log" Page 1 with the current conditions. Some minor variations in RPV and RR parameters may be used to add to realism.
- Activate Malfunction PC -14, "Leak Between DW and Containment" as necessary to drive Drywell Pressure to equal Containment Pressure.
- Note the change in conditions resulting in the insertion of the malfunction.

### TASK STANDARDS:

- Complete the page 1 of the "Operations MCR Critical Parameter Log" by inserting the correct values for each parameter
- Correctly identify the changes in Drywell Pressure

### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

### **PROCEDURAL/REFERENCES:**

OP-AA-103-102, WATCHSTANDING PRACTICES Operations MCR Critical Parameter Log Page 1 (On-line)

### **EVALUATOR INSTRUCTIONS:**

- Provide a marked up copy of the Operations MCR Critical Parameter Log, Page 1, prepared as described in the Simulator Setup Section.
- Amplifying cues are provided within the JPM steps.

### **INITIAL CONDITIONS AND INITIATING CUE:**

# JPM NUMBER: RO A.1.b. 1

# **REVISION: 00**

The plant is operating at steady state at near full power. There are no testing or other plant activities in progress.

CRS has directed you to perform a panel walkdown utilizing the Operations MCR Critical Parameter Log and report the results to the CRS.

START TIME:

# JPM NUMBER: RO A.1.b. 1

### **REVISION: 00**

### **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

### **Operations MCR Critical Parameter Log**

#### \*Correctly fill in the parameters for the following:

- Reactor Pressure Vessel
- Drywell
- Containment

Standard	Complete page 1 of the Operation MCR Critical Parameter Log accurately.
CUE	If the ATM values for drywell pressure are requested state they all read 0.0 psig. If containment pressure is asked for from the ATMs report 0.0 psig
Comments	If completed log is submitted without a report of the abnormal parameter, then the <b>CRS should NOT prompt</b> the CRO by asking about abnormal readings. SAT UNSAT Comment Number

#### 4.2 WATCHSTANDING PRACTICES, OP -AA-103-102

*4.2.5.1	BE ALE must be i as appro- plant safe setpoint i tolerance	RT for c dentified priate. T ty is chal s reached s. Use di	hanging cri l and comm The expectati lenged. The and to adjust verse inform	tical parameters, alarms and/or trends. Any changes nunicated to the Unit Supervisor for Field Supervisor ion is to identify and resolve the abnormal trend before goal is to identify adverse trends before an alarm st equipment to maintain parameters within prescribed nation sources to verify status where possible.
Standard	• • • • • • • •	CRO co prompti	mmunicates ng by the Cl	the change in Drywell Pressure to CRS without RS.
CUE		CRS aclindication	knowledges on.	the communication of the abnormal Drywell Pressure
Comments	e ana senarenere	It is not of the al	required for bnormal para	the CRO to neither identify nor speculate on the cause ameter.
		SAT	UNSAT	Comment Number

# JPM NUMBER: RO A.1.b. 1

# **REVISION: 00**

# **TERMINATING CUES:**

CRO reports completion of page 1 of the Operations MCR Critical Parameter Log and submits it to the CRS with any reports of any changes in critical parameters.

**STOP TIME:** 

### **K/A REFERENCE NUMBERS**

		Importan	ce Rating
K/A SYSTEM NUMBER	K/A NUMBER	RO	SRO
Generic	K 2.1.33	3.4	4.0
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# CLINTON POWER STATION

# JPM NUMBER: RO A.1.b. 1

# **REVISION: 00**

Page 9 of 10

### **INITIATING CUE**

The plant is operating at steady state at near full power. There are no testing or other plant activities in progress.

CRS has directed you to perform a panel walkdown utilizing the Operations MCR Critical Parameter Log and report the results to the CRS.

### Date 1/15

N

# 

### **OPERATIONS MCR CRITICAL PARAMETERS (On Line)**

1

	READING	UNITS	INSTR. @	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:0
	APRM*- A B C D	%	C51DA021/22/23/24		1						•	91	90	90	90							
E	PRESSURE	PSIG	RP-DD010	(gi shi				왕 ( <sup>11</sup> ) (*)				1020	1000	1020	1020			7223				
A	LEVEL (NR) * - A B C	INCHES	C34DA007/8/9									34	34	34	34							<b></b>
	RT - F/D 'A' FLOW	GPM	G33DA004									121.4	121.4	121.4	121,4					Verta d	1997 - 19 <sup>97 -</sup>	
0	RT - F/D 'B' FLOW	GPM	G33DA005									120.1	170.1	120.1	120.1	<u> </u>					<u> </u>	-
R	RT - SYSTEM DELTA-FLOW	GPM	E31DA001									25.2	27.2	26.2	29.6						: 같은 것:	
Р	TOTAL STEAM FLOW	MLBM/HR	MS-BD021									13.3	13.1	11.3	12.3					<u></u>		
RE	TOTAL FEEDWATER FLOW	MLBM/HR	FW-BE001									13.3	13.3	13.3	13.3	<u> 1</u>				NS 3.3		
s	RR - INNER SEAL 'A'	PSIG	B33DA005			1						1051	NK	1045	1051		<u></u>	- 140 - 140 - 1	1999 (1996) - 1996 (1996) 1997 - 1996 (1996) - 1996 (1996) 1997 - 1996 (1996) - 1996 (1996) (1996) (1996) (1996) (1996) (1996) (1996) (19	<u></u>	No. Contractoria	
U U	RR - OUTER SEAL 'A'	PSIG	B33DA007									614	511	515	SIL							
R	RR - INNER SEAL 'B'	PSIG	B33DA006									1051	1050	1051	1051	<u> </u>		<u> </u>		<u>2940 - 1 1</u>	<u>. 5. 5 </u>	
β	RR - OUTER SEAL 'B'	PSIG	B33DA008									515	514	574	514					849 C.A		
v	RR - DRIVING FLOW 'A'	GPM	B33DA013									31300	20975	31359	3050			274 - 2747 - 29 -			<u></u>	
ES	RR - DRIVING FLOW 'B'	GPM	B33DA014									31215	3/180	31200	31715		843-82	EUR.			1979	
s	TOTAL CORE FLOW	MLBM/HR	B33DA024									81.3	<b>RI.4</b>	82.0	81.7	•	<u>an an a</u>	<u>91 188</u>	<u>- 1971 - 1995</u>			<u> </u>
	RR - FCV 'A' POSITION	%	B33DA009	an a								75	75	75	76					986 C.S	<u></u>	<u> 1886</u>
	RR - FCV 'B' POSITION	%	B33DA010									74	74	75	75			and an ang	<u>, 1998</u> , 1999.			
Ы				 																		
Ь	PRESSURE	PSIG	B21DD010									.6	.6	.6	.6							
w	TEMPERATURE	er di Frenci	CM-DD010	292. A		연물관 글						105	105	105	105							
													;									
	PRESSURE	PSIG	CM-DD030									0,0	0.0	0.0	0.0							1999 - S.
N	TEMPERATURE	F	CM-DD020									82	92	92	82							
M	SUPPRESSION POOL TEMP	F	CM-DD040									80	80	80	80							
	SUPPRESSION POOL LEVEL	FEET	SM-DD010									19.2	19.2	19.2	19.2							
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	Press																				,	4

\* CIRCLE CHANNEL USED

@ OR OTHER EQUIVALENT CHANNEL

### ENTER VALUES FOR <u>ALL</u> PARAMETERS. THESE VALUES WILL HELP TO PROVIDE TRENDING INFORMATION.

KEEP PAGE FOR A PERIOD OF TWO (2) WEEKS.  $Paga \_ 1 c f \_ 2$ 

### O:\MCRAPPS\PANELWALKDOWN\PNL\_WDN.XLS

## **OPERATIONS MCR CRITICAL PARAMETERS (On Line)**

	READING	UNITS	INSTR. <sup>@</sup>	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:0
	CONDENSER VACUUM	"HG	CA-DA201/202 CD-BE203/204									-28.3	28.3	-28.3	-28.3							
	HOTWELL LEVEL	INCHES	CD-DA401									28.3	282	783	233	23284				1993. SP2	1979 N.W	<u>90,955</u>
	CONDENSATE TEMP	F	CD-DA001				-	1				81.0	84.0	2/1	01.0							
	FEEDPUMP SUCTION * PRESS - A B C	PSIG	CB-DA201, FW-BA201/202									451	451	452	451							
B	FEEDPUMP SPEED - 'A'	RPM	FW-DA917			C# 30			aller of stand	1		4210	4115	ULAN	415	an in the room	de l'accelo		in the second second	and the start	107 S 111-1	<u> </u>
ĩ	FEEDPUMP SPEED - 'B'	RPM	FW-DA918							1350. Y		2745	470	474	471.0	2-2-4-1-1 2-2-4-1-1	2-0-9-11 2-1-9-11	ang akarang s Sang akarang s	) 1985(No.498)		1. Alteria	1995, 20, 20, 20, 20, 20, 20, 20, 20, 20, 20
A	FW TEMP * - A B	F	FW-8D030/031							1 10 11		412.9	400	A170	110			관람을 즐근다.	<u>nya</u> teni	ang	e Baserie) I	
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0	TO BRG HEADER PRESS	PSIG	TO-DA201		17876		i sen p		<u>keren v</u>			250	250	24.9	750		21.534	1980-24 <b>8</b>	1. A. S.	in an	den si co	1.000
F	TO TEMP - IN	F	TO-DA002									1004	1000	1000	1000			9.980 - 199. 	999 - 994 	A. S. S.	2.,2493.)3 •	<u> </u>
Р	TO TEMP - OUT	F	TO-DA001			(11.1-7).	1919 - S	1997. Se 199			4 18 19 19	13/ 2	100,1	146	1001				1947CM (S		N. Never	
L	SEAL STEAM PRESS	PSIG	GS-DA201									21	1.1	1	21	ini erette	A production (MAL)	7.2.1.097	nit girigen i		466000	<u> </u>
N	MAIN EHC PRESSURE	PSIG	EH-DA201									4.00	4.00	4.1	Tel Lan		es en de la	- 1945-S	2012-2004 	9.495 - 198.	a. Anteriore	
т	MAIN GEN POWER OUT	MWE	MP-BD004							i di tali se iv	97 Y. A. A. A.	1000	1600	1600	1000		1997 - N. B	1.1999.99			n jegenes te	
	MAIN GEN REACTIVE	MVAR	MP-BF018									UCT	(0-8	1041	1041	an an an an	1997 - 1997 -	1.000	196 g. 21	- alighe ea	10.028	<u> </u>
	MAIN GEN VOLTAGE %	кv	MP-BF012/14/16						il est physic			24	1122	1153	155	(4 (4.8 k) 1	<u>11 - 14 - 14 - 14 - 14 - 14 - 14 - 14 -</u>		<u>ti estale</u>	ang sa		<u>, 1966</u>
	MAIN GEN CURRENT %	KAMPS	MP-BF013/15/17		<u></u>	승규 전 것	30869	1917 <u>(</u>		(1999) 1999년 - 1997년 - 1997년 1997년 - 1997년 -	19. C.M.	201	27.0	701	10 V		R ORDA	Q.48%00.	200 (	starieta		Statistics -
	MAIN GEN FIELD CURREN	AMPS	MP-DA507	<u></u>		11 (14 <sub>11</sub> 14 <sub>1</sub> 14 1			nden fin	a daga da ga	4 2 . A. F	1160	16	460	40,4	212234		314g 관리에		소송하지		
	MPT LOADING	MVA	MP-BE005			848. SV		(40.30Å	0.49.46	263350	જોરા સ્ટેસ્ટેસ	((00	(100	1100	1100	and the second	anton e	et et al de	<u></u>	008-863	Marine I.	
	GEN H2 PRESS	PSIG	HY-BA201	<u></u>			Anglaige Ag	1000	ang pangkan T	San Sing	13 140	78	78	72-	77	일 가 있을 것이다. 	13 (22-1) 	n stadi	4.8 STA	<u>03 %</u>	<u>3973 (51</u>	
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\* CIRCLE CHANNEL USED

% HIGHEST READING CHANNEL @ OR OTHER EQUIVALENT CHANNEL

B OK OTHER EQUIVALENT CHANNEL

ENTER VALUES FOR ALL PARAMETERS. THESE VALUES WILL HELP TO PROVIDE TRENDING INFORMATION.

Page 2 of 2

KEEP PAGE FOR A PERIOD OF TWO (2) WEEKS.

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5

### **OPERATIONS MCR PANEL WALK DOWN CHECKS (On Line)**

READING	UNITS	NORMAL	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20
RAT SVC VOLT	N/A	IN OPERATION						[			-	-	-	-									F
ERAT SVC VOLT	N/A	IN OPERATION								n Norden Georgi	-	-	1								A 1944		
BROKAW MW & MV	N/A	CHANNEL CHECK		1							-	-	-										<u> </u>
RISING MW & MV	N/A	CHANNEL CHECK									-	1	-	/									
LATHAM MW & MV	N/A	CHANNEL CHECK			1					1		~	-	-									<u> </u>
N & S BUS VOLT	KV	~358.8												~					<u>9</u> , 99				
6.9 & 4.16 CURRENT &	34 NI/A								· 요구한 것 제 구것			Art de la		NEQ.C						1.1.1.1.3			
MW	A NING	NOT IN RED BAND	1999. D	le esta								- /	1										
ALL 480 UNIT SUBS	N/A	NOT IN RED BAND									-	-		1									
6.9 & 4.16 VOLT	KV	VALUE IN SPEC									~			1									
DCMCC 1E & 1F	KV	VALUE IN SPEC									/												
CY & MC PRESS	PSIG	VALUE IN SPEC									1		C										
MC & CY COMBINED LVLS	%	> 66%									1	\	1	/									
CP FLOW	N/A	NOT IN RED BAND									/	/	/	1									
HOTWELL LEVEL	N/A	IN GREEN BAND									7	/	/	~	-								
FLASH TANK LVLS	INCHES	~ 0in									1	1	1						en gant i Sesteration				
ALL FW HTR LVLS	INCHES	IN GREEN BAND									/	-	/	~				a constant	- 1995 - 17 - 1			191 - 2011-193	<u> </u>
WT PRESS	PSIG	~90psig	202		38 B				(* 174.) 1		/	/	1		연안했				<u> (</u> 1975)			SC - F	
EH PRESS	PSIG	~1600psig									~	1	/	/					(15), (13),	<u>2011 - 1</u> . 1997 - 1997		a daga da a	
HYDROGEN PRESS	PSIG	~60psig				1999 (j. 1997) 1997 - J. 1997 (j. 1997) 1997 -					1	/	1	1								200 Q.2	
TG BEARING PRESS	PSIG	~25psig									/	~	/	/							<u></u>		<u> </u>
TURB OIL LEVEL	N/A	IN GREEN BAND					- 			9993 1997	/	1	/	1									
TO & EH TEMPS	N/A	IN GREEN BAND									_	_	~	$\leq$									
MSR's BALANCED	PSIG	BALANCED									1	1	/	/									
STM SEAL HDR PRESS	N/A	~ 4 psig									-	~	1	/								115 <u>1</u>	 I
SSE SHELL LEVEL	N/A	IN GREEN BAND								é di k	-	~	~									기 사람 기 사람	
MSR & RHTR DRAIN TANK LEVELS	INCHES	~ Oin									-	1	-	/		<u> </u>							
CCW HTX OUTLET PRESS	N/A	IN GREEN BAND									-		~							1202		2. S.M. 83	
FC PUMP CURRENT	N/A	IN GREEN BAND									1		-	-									<u> </u>
											1	-	-	~									

ONLY READINGS DESIGNATED ON 4 HOUR INTERVALS REQUIRE VALUES ENTERED. ALL OT BLOCKS ARE CHECK MARKS ONLY.

Page 1 of I

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	READING	UNITS	NORMAL	0:00	) 1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:0	0 12:00	13:00	14:00	15:00	16:00	17:00	18:
5	WS PUMP CURRENT	N/A	IN GREEN BAND	100								-	-	1	1							
5	CW CURRENT	N/A	IN GREEN BAND									/	-									Γ
1	CW LINE 1A delta P	PSID	N/A										7		day of							
	CW LINE 18 delta P	PSID	N/A						to a constant				7.5		¢4,							
		N/A	IN GREEN BAND									/	/	1	/							
- 5]			AS EXPECTED				1	Ī					70		Ţ				1			
	WO CHILLER CURRENTS	N/A	~ BALANCED				11 - 24 11 - 24	24.930 24.930	entrit.	 		-			-	i narve		. 32.38	a en a el		an a	T
5	MCR delta P	IN H₂O	~+.25 INCHES	· · · ·	1														<u>1104.00</u>		<u>628.5</u>	-
	SEC CONT delta P	N/A	IN GREEN BAND			124.53								1				31.116		an a	1 1953 - 1953	-
	FUEL BLDG delta P	N/A	IN GREEN BAND								1.150							1.20				$\vdash$
	DW CHILLER IN TEMP	°F	N/A																			
	DW CHILLER OUT TEMP	۴	N/A																			
]	DIV 1 FOST LVL	%	N/A						araşı.				2 8 (Z-1).	. <u></u>							Parts and the	
	DIV 2 FOST I VI	0/	NI/A		1374 1										Constrained							
	DIV 3 FOST LVL	/0 %	Ν/Δ		1997 - 1997				1								e Lot to d					
	DCMCC 1A.1B.1C.1D	volts	>129 volts						2007,253					_								
	DIV 3 SX PRESSURE	psig	> 80 psig	NY N	gan e.		1.1.6	-13-13-13-13 -13-13-13-13	- 19 M.	an da tang	yan yez				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	E 2000, and a	1. 19. 19. 10. 19	70 ; x 10 y .	ang		ur araya	- 191.00
								1.000					9174 (A)	<u></u>						<u>28 25</u> -	in de la composition de la composition Composition de la composition de la comp	
-	DIV 1 & 2 SX PRESS	N/A	IN GREEN BAND					-								1						┢──
	DIV 1 & 2 ADS AIR HDR PRESS	psig	175 psig to 150 psig								14 - 4 (1346)	1	-		/							
	DIV 1 & 2 ADS BACKUP AIR BOTTLE PRESS	psig	>2300 psig									/		1	/	·					<u></u>	
	CRD PUMP AMPS	N/A	IN GREEN BAND									/		-								
	CRD DRIVE WTR delta P	N/A	IN GREEN BAND									_			1						$\neg$	$\square$
	CRD CHRG WTR PRESS	N/A N/A	IN GREEN BAND									4										
	FLOW	0/	100%		and the second			20120			1.04.1				<u> </u>							Ĺ
	OG HYD I EVEL	70 9/.	<10/								an a		4		<u> </u>							<u>à s</u>
1	DESC VESSEL dalta D	70 IN H O	<1%		and a start of the			:				~		_								l
	ADSORDED VALUET TEMP		N/A		- 1,514,124 						-		1.0		CANE.							
	PROFILE	°F	CONSTANT FOR CONDITIONS									1		_								
	OG STREAM FLOW (CHANNEL CHECK)	SCFM	CHANNEL CHECK									1	1	/	/							

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	CLINTON POWER STAT	ION
	Job Performance Meas	ure
	JPM Number: RO A.2.1	
	Revision Number: 00	
	Date: 4/11/2002	
Developed By:	D Antonelli Instructor	<u>4/11/02</u> Date
Validated By:	T Pickley SME or Instructor	<u>5/6/02</u> Date
Review By:	P. O'Brien Operations Representative	<u>5/10/02</u> Date
Approved By:	B. Price Training Department	<u>5/20/02</u> Date

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<u>19. ...</u>

### JPM NUMBER: RO A.2.1

**REVISION:** <u>00</u>

# 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 through 11 below. 1. Task description and number, JPM description and number are identified. Knowledge and Abilities (K/A) references are included. 2. 3. Performance location specified. (in-plant, control room, or simulator) 4. Initial setup conditions are identified. 5. Initiating and terminating cues are properly identified. 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 referenced by this JPM matches the most current revision of that procedure: Procedure Rev. Date Pilot test the JPM: a. verify cues both verbal and visual are free of conflict, and b. ensure performance time is accurate. 10. If the JPM cannot be performed as written with proper responses, then revise the JPM. 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page. SME/Instructor Date SME/Instructor Date SME/Instructor Date

JPM NUMBER: RO A.2.1

**REVISION: 00** 

# Revision Record (Summary)

1. **Revision 00** This is a new JPM

Page 3 of 10

JPM NUMBER: RO A.2.1

# **REVISION:** <u>00</u>

Operator's Name: Job Title: □RO □ SRO
JPM Title: Remove an Annunciator From Service JPM Number: RO A.2.1 Revision Number: <u>00</u> Task Number and Title: Knowledge of the process for controlling temporary changes.
K/A Number 2.2.11 Importance 2.5 / 3.4
Suggested Testing Environment: Control Room
Actual Testing Environment: 🛛 Simulator 🖵 Plant 🖵 Control Room
Testing Method:□ Simulate Alternate Path / Faulted: □ Yes ■ No □ Perform
Time Critical: 🛛 Yes 🔳 No
Estimated Time to Complete: <u>10</u> minutes Actual Time Used: minutes
References: CPS No. 1406.01 Annunciator Tracking Program CPS No. 5060.08C Low Level DG Day Tank 1A
<b>EVALUATION SUMMARY:</b> 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:
Comments:
Evaluator's Name:
Evaluator's Signature: Date:

Page 4 of 10

### JPM NUMBER: RO A.2.1

### **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.

### SIMULATOR SET-UP CONDITIONS:

Not Applicable

### TASK STANDARDS:

CRO correctly identifies the following:

- Location for placement of the Disabled Annunciator Fully (DAF) RED FLAG on Panel 1 H13-P877, Tile 5060.08C.
- Location for pulling the alarm card at 1H13-P850, Row P877-14A, Card 8C

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

None

#### **PROCEDURAL/REFERENCES:**

CPS No. 1406.01 Annunciator Tracking Program CPS No. 5060.08C Low Level DG Day Tank 1A

### **EVALUATOR INSTRUCTIONS:**

Ensure that the CRS is aware of the need to access the MCR for passive activities with an examinee.

Provide task briefing using Initial Conditions. Amplifying cues are provided within the JPM steps.

### JPM NUMBER: RO A.2.1

### **REVISION:** <u>00</u>

### **INITIAL CONDITIONS:**

Annunciator 5060.08C Low Level DG Day Tank 1A is actuating periodically without a corresponding change in Day Tank Level. Once the alarm is acknowledged it will clear after a few minutes. The frequency of the alarms and clearing is irregular and unpredictable, creating a distraction.

This deficiency has been evaluated, and the following actions and decisions have been made.

- Neither a safety evaluation nor a temporary modification is required.
- Maintenance Action Request has been generated to trouble shoot the alarm (AR# 006789).
- Compensatory actions have been formulated which include issuance of instructions to the Area operator for verifying Day Tank level once every four hours.
- According to CPS No. 1406.01, Annunciator Tracking Program, the disposition of the annuciator condition is a DISABLED ANNUNCIATOR FULLY (DAF).
- CRS has made the entry into the Annunciator tracking log.

<u>CAUTION</u> During the performance of this evaluation no actual manipulation of plant equipment is to be performed by the examinee.

ASSIGNED TASK:

Prepare a DAF tag and **simulate** placement of it as required by CPS No. 1406.01. **Simulate** disabling annunciator 5060.08C Low Level DG Day Tank 1A

**START TIME:** 

# JPM NUMBER: RO A.2.1

**REVISION: 00** 

### **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

### 8.1 ANNUNCIATOR TRACKING

a)

EVALUATOR NOTE

Step 8.1.4 and Step 8.1.5 may be performed in either order. Performance of Step 8.1.5 yields the card location for performing Step 8.1.4.

8.1.4 Special Instructions specific to <u>Disabled Annunciators - Partially/Fully (DAP/DAF)</u>

\*The annunciator should be fully disabled (DAF) by pulling the annunciator card. Pulling of annunciator cards is the preferred method of disabling annunciators. Since this activity is covered in this procedure, no temporary modification is required per CPS No. 1014.03, TEMPORARY MODIFICATIONS.

Standard	Correctly identifies the correct location for pulling the alarm card at 1H13- P850, Row P877-14A, Card 8C.		
CUE	Do not actually touch the card. You may merely identify the proper location		
Comments	Ensure that the examinee request permission to access the back row panel P850 from the CRS.		
	No specific guidance on whether the associated alarm card is in P630 or P850. Student may need to look into both panels to determine which one houses the alarm card and does not constitute a competency issue.		
	Card location address is inscribed on alarm window 5060.08C at P877.		
	SAT UNSAT Comment Number		

Page 7 of 10

JPM N	NUMBER: RO	CLINTON POWER STATION ADMIN JPM A.2.1 REVISION: <u>00</u>
8.1.5	a) P F	repare a BLUE (for OOS), an ORANGE (for DAP), or a RED (for DAF) Tape LAG(s) as follows:
	Ir O	clude on the FLAG the date, and applicable item which resulted in the OS/DAP/DAF condition (e.g., AR #, Tag Out #, Temp Mod #, Proc #, etc.).
	Standard	Examinee prepares a RED DAF tag with AR 006789 noted on the tag.
	CUE	
	Comments	Ensure that examinee request permission to enter the "At the Controls" area of the MCR from WEC Supv if it is necessary to obtain the DAF tag.
		SAT UNSAT Comment Number
8.1.5	b) Pl w	ace the applicable FLAG(s) (OOS/DAP/DAF) on the applicable annunciator indow(s).
	Standard	Correctly identifies location for placing the DAF tag at P877 window 5060.08C.
	CUE	Do not actually place the tag. You may merely identify the proper location.
	Comments	Ensure that examinee request permission to enter the "At the Controls" area of the MCR from WEC Supv.
2. A state of the state of t	n an sharan a shekara ya sasa asa ay sa Sharan ya shekaran ya shekaran ya shekaran ya shekaran ya shekaran ya s	SAT UNSAT Comment Number

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# JPM NUMBER: RO A.2.1

# **REVISION: 00**

### **TERMINATING CUES:**

Terminate the JPM once examinee has identified a location for the placement of the DAF tag and a card location for disabling the alarm.

Inform the examinee that someone else will make the appropriate log entries.

**STOP TIME:** 

# **K/A REFERENCE NUMBERS**

### Importance Rating

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HALLING A SYSTEM IN UNBER	K/A NUMBER	RO	SRO	
		<u></u>	BRO	
	0 0 1 1	2.5	2.4	
Generic		25	34	
		L	2.T	Constant and the second second

# JPM NUMBER: RO A.2.1

### **REVISION: 00**

### **INITIATING CUE**

### **INITIAL CONDITIONS:**

Annunciator 5060.08C Low Level DG Day Tank 1A is actuating periodically without a corresponding change in Day Tank Level. Once the alarm is acknowledged it will clear after a few minutes. The frequency of the alarms and clearing is irregular and unpredictable, creating a distraction.

This deficiency has been evaluated, and the following actions and decisions have been made.

- Neither a safety evaluation nor a temporary modification is required.
- Maintenance Action Request has been generated to trouble shoot the alarm (AR# 006789).
- Compensatory actions have been formulated which include issuance of instructions to the Area operator for verifying Day Tank level once every four hours.
- According to CPS No. 1406.01, Annunciator Tracking Program, the disposition of the annuciator condition is a DISABLED ANNUNCIATOR FULLY (DAF).
- CRS has made the entry into the Annunciator tracking log.

CAUTION

During the performance of this evaluation no actual manipulation of plant equipment is to be performed by the examinee.

### ASSIGNED TASK:

Prepare a DAF tag and **simulate** placement of it as required by CPS No. 1406.01. **Simulate** disabling annunciator 5060.08C Low Level DG Day Tank 1A





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## JPM NUMBER: 011288J001

**REVISION: 00** 

# JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

	NOTE:	All step Prior to	os of this checklist should be performed upon o JPM usage, revalidate JPM using steps 8 th	initial validation. rough 11 below.
		1.	Task description and number, JPM description identified.	on and number are
		2.	Knowledge and Abilities (K/A) references are	e included.
		3.	Performance location specified. (in-plant, con simulator)	ntrol room, or
		4.	Initial setup conditions are identified.	
		5.	Initiating and terminating cues are properly id	dentified.
	·	6.	Task standards identified and verified by SM	E review.
	<u> </u>	7.	Critical steps meet the criteria for critical step with an asterisk (*).	os and are identified
		8.	Verify the procedure referenced by this JPM current revision of that procedure:	matches the most
			Procedure Rev Date	
		9.	Pilot test the JPM: a. verify cues both verbal and visual are free b. ensure performance time is accurate.	of conflict, and
		10	. If the JPM cannot be performed as written wi responses, then revise the JPM.	ith proper
		11	.When JPM is revalidated, SME or Instructor cover page.	sign and date JPM
		SM	E/Instructor	Date
		SM	E/Instructor	Date
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	e trainei	SM	E/Instructor	Date
				$\Delta r_{\mu}$

### JPM NUMBER: 011288J001

# **REVISION:** <u>00</u>

# Revision Record (Summary)

1. **Revision 00**, Converted from JPM VC-33 R6, modified to reflect Rev 21 of 3402.01 and put into the new format.

Page 3 of 12

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## JPM NUMBER: 011288J001

# **REVISION:** <u>00</u>

Operator's Name:
Job little: URO U SRO
JPM Title: Startup the Control Room Ventilation System (VC) in the High Radiation Mode
JPM Number: 011288J001
Revision Number:00
Task Number and Title: 011288C538
K/A Number 2.3.10 Importance: 2.9/3.3
Suggested Testing Environment: Simulator
Actual Testing Environment: 🗅 Simulator 🗅 Plant 🖵 Control Room
Testing Method:□SimulateAlternate Path / Faulted:■Yes□No■Perform
Time Critical: 🛛 Yes 📕 No
Estimated Time to Complete: 20 minutes Actual Time Used: minutes
References: CPS No. 3402.01 CONTROL ROOM HVAC (VC)
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?
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:
Evaluator's Signature: Date:

Page 4 of 12

### JPM NUMBER: 011288J001

### **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.

#### SIMULATOR SET-UP CONDITIONS:

Initialize to any suitable IC, ensure a VC train is running in normal mode. OPEN/verify OPEN outside damper 0VC01YB Override 5050 7M HI RADIATION CONT RM HVAC SYSTEM DIVISION I to the alarm status. Insert malfunctions and I/Os to cause: PR009A and 0RI-VC075 (P801-66B) to indicate 11 mR/hr - 5397 PR009C and 0RI-VC076 (P801-66B) to indicate 4 mR/hr - 2895

PR009B and 0RI-VC175 (P801-67B) to indicate 1 mR/hr - 4290PR009D and 0RI-VC176 (P801-67B) to indicate 5 mR/hr - 3300

### **TASK STANDARDS:**

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

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

None

#### **PROCEDURAL/REFERENCES:**

CPS No. 3402.01, CONTROL ROOM HVAC CPS No. 5050.06M HI RADIATION CONT RM HAVAC SYS DIVISION 1 CPS No. 5140.64,MCR AIR INTAKE 1RIX-PR009A, B, C, D

### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

If AR/PR is not functioning a Radiation Level Data Sheet is attached for providing examinee radiation level information available on 1H13-P801. This data sheet may be handed to the examinee when they pursue the information.

### JPM NUMBER: 011288J001

**REVISION: 00** 

### INITIAL CONDITIONS AND INITIATING CUE:

Respond to the annunciator on P801 insert 5050.

#### NOTE

If AR/PR doesn't function, when examinee pursue reading the Radiation Level indicators on P801 or PRM provide the information using the attached briefing sheet.

START TIME:

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### CLINTON POWER STATION SYSTEM JPM

### JPM NUMBER: 011288J001

# **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

### <u>NOTE</u>

Hi Radiation Isolation Logic is 1 out of 2 twice.

A single monitor will initiate the HI RADIATION CONT RM HVAC SYST DIVISION 1(2) annunciator, but will <u>not</u> initiate isolation.

Cause of such an alarm will need to be investigated and appropriate action taken.

Step 8.3.3.1 may be used to initiate operation of VC system in HI RAD mode.

The remainder of procedure should be followed regardless of whether initiation was automatic or manual. **Refer to ITS LCO 3.3.7.1 for further guidance**.

Run time with flow through VC make up filter train 0VC09SA(B) and VC supply filter train 0VC07SA(B) shall be tracked per CPS 9094.01, Cumulative Data Report. «LBD-1»

8.3.3 High Radiation Isolation

#### \*8.3.3.1 <u>IF</u> <u>THEN</u> Manual Initiation of a High Radiation Isolation is required, Depress both Cont Rm Mu Trn Hi Rad initiation push-buttons.

Standard	Both pushbuttons are depressed, located on 1H13-P801, and associat indication lights are ON.		
CUE	Respon	id as RP if a	notified for the abnormal radiation conditions
Comments		an a	
	SAT	UNSAT	Comment Number

JPM NUME	ER: 011288J001 REVISION: 00
8.3.3.2	<ul> <li>Verify Supply Air Trn A(B) un-isolates as follows:</li> <li>1) 0VC09YA(B), Sply Air Trn A(B) Filt Inlet Dmpr opens.</li> <li>2) 0VC10YA(B), Sply Air Trn A(B) Filt Byp Dmpr closes.</li> <li>3) 0VC11YA(B), Sply Air Trn A(B) Filt Outlet Dmpr opens.</li> </ul>
Standard CUE Comments	Damper lights for 0VC09YA(B) and 0VC11YA(B) indicate OPEN Damper light for 0VC10YA(B) indicates CLOSED
	SAT UNSAT Comment Number
8.3.3.3	Verify running/start 0VC05CA(B), Cont Rm HVAC A(B) MU Air Fan.
Standard CUE	Red light ON.
Comments	SAT UNSAT Comment Number
	<ul> <li>Verify the following dampers open:</li> <li>1) 0VC02YA(B), Cont Rm Trn A(B) MU Air Dmpr.</li> <li>2) 0VC06YA(B), Cont Rm MU Trn A(B) Outlet Dmpr.</li> <li>3) Verify 0VC114YA(B), Cont Rm MU Trn A(B) Flow Cont Dmpr modulates.</li> </ul>
Standard	Damper lights for 0VC02YA(B) and 0VC06YA(B) indicate OPEN and 0VC114YA(B) is modulating.
CUE Comments	
	SAT UNSAT Comment Number

### CLINTON POWER STATION SYSTEM JPM

### JPM NUMBER: 011288J001

8.3.3.6	Verify the following dampers close:
	1) 0VC03YA(B), Cont Rm Trn A Min OS Dmpr.
	2) 0VC05YA(B), MCR Max Intake & Purge Dmpr.
	3) 0VC48YA(B), MCR Max Intake & Purge Dmpr.
	4) 0VC49YA(B), MCR Max Intake & Purge Dmpr.
	5) 0VC81YA(B), MCR Max Intake & Purge Dmpr.
	6) 0VC115YA(B), Cont Rm Trn A Min OS Dmpr.
	7) 0VC69Y, MCR Locker Rm Exhaust Dmpr.
	8) 0VC70Y, MCR Locker Rm Exhaust Dmpr.
	9) 0VC11C, MCR Locker Rm Exhaust Fan is not running
Standard	Damper lights for 0VC03YA(B), 0VC05YA(B), 0VC48YA(B), 0VC49YA(B), 0VC81YA(B), 0VC115YA(B), 0VC69Y, and 0VC70Y indicate CLOSED Fan lights for 0VC11C indicate NOT running.
CUE	
Comments	

### SAT UNSAT Comment Number

8.3.3.7 Cont Rm Trn A(B) Min Air Dmpr 0VC01YA(B) is located on the east(west) side of the plant.

Use the following table to quickly locate monitors and indicators to aid in completion of the remaining steps in section 8.3.3.

	MONITOR	LOCATION	INDICATION	LOCATION
DIV 1:	PR009A	AB 781'W	0RI-VC075	P801-66B
	PR009C	CB 825'E	0RI-VC076	P801-66B
DIV 2:	PR009B	AB 781'W	0RI-VC175	P801-67B
	PR009D	CB 825'E	0RI-VC176	P801-67B

#### Standard

Locate monitors and obtain reading.

If AR/PR is not functioning then hand attachment with above readings to examinee when they pursue this information, if not done so previously

Cue

	MONITOR	INDICATION	LOCATION	READINGS
DIV 1:	PR009A	0RI-VC075	P801-66B	11 mR/hr
	PR009C	0RI-VC076	P801-66B	4 mR/hr
DIV 2:	PR009B	0RI-VC175	P801-67B	12 mR/hr
	PR009D	0RI-VC176	P801-67B	5 mR/hr

### Comments

SAT UNSAT Comment Number

Page 9 of 12

CLINTON POWER STATION	
SYSTEM JPM	

JPM NUMBER: 011288J001

REVI	<b>SION:</b>	00
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*8.3.3.8	IF A	A high radia 66B and 67I	tion conditio	on exists as indicated by	7 OS Air I	nlet Rad M	on on P801-
	THE	N					
•	1. <b>2.</b>	Open/ver radiation Shut/veri	rify open the 1 level ify shut the	e minimum air dampe other minimum air da	r (0VC01 mper.	YA) with t	he lowest
 Standard		Exami	nee opens/ve	erifies 0VC01YA is OP	EN and sl	huts/verifie	s 0VC01YB is
CUE Comments		SHUT	•				
		SAT	UNSAT	Comment Number	· ·		
TERMINATI	NG C	UES:					
The VC Syster OPEN.	n is ru	nning in the	e High Radia	tion Mode with Minim	um Outsi	de Air Dam	per 0VC01YA
STOP TIME:							
			K/A RE	FERENCE NUMBER	<u>S</u>		· · · · · · ·
						Importan	ce Rating
 K/A SYSTE	M NU	MBER		K/A NUMBE	R	RO	SRO
Generic				2.3.10		2.9	3.3

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## CLINTON POWER STATION SYSTEM JPM

# JPM NUMBER: 011288J001

# **REVISION:** <u>00</u>

# **INITIATING CUE**

Respond to the annunciator on P801 insert 5050.

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# CLINTON POWER STATION SYSTEM JPM

JPM NUMBER: 011288J001

**REVISION:** <u>00</u>

# **RADIATION LEVEL CUE**

	MONITOR	INDICATION	<b>LOCATION</b>	READINGS
DIV 1:	PR009A	0RI-VC075	P801-66B	11 mR/hr
	PR009C	0RI-VC076	P801-66B	4 mR/hr
DIV 2:	PR009B	0RI-VC175	P801-67B	12 mR/hr
	PR009D	0RI-VC176	P801-67B	5 mR/hr

Page 12 of 12



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JPM NUMBER: RO A.4.1

**REVISION:** <u>01</u>

# 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 through 11 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, or simulator)
  - 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues 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 referenced by this JPM matches the most current revision of that procedure:
      - Procedure Rev. \_\_\_\_ Date \_\_\_\_
    - Pilot test the JPM:
       a. verify cues both verbal and visual are free of conflict, and
       b. ensure performance time is accurate.
    - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
    - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

SME/Instructor

Date

Date

# JPM NUMBER: RO A.4.1

# REVISION: 01

Revision Record (Summary)

1. Revision 00,

This JPM is from the 2001 ILT NRC Exam

# JPM NUMBER: RO A.4.1

# REVISION: 01

Operator's Name:	
Job Title: 🛛 RO 🖾 SRO	
JPM Title: Make a Plant Announcement for FIRE in the Paint and Oil Storage Room	10
with Area Evacuation	
JPM Number: RO A.4.1	
Revision Number: 01	
Task Number and Title: 014286C512, Respond to a fire	
K/A Number	
2.4.43, Knowledge of emergency communications systems and techniques, Importance 2.8/3.5	
Suggested Testing Environment: Simulator	
Actual Testing Environment: 🗅 Simulator 🗅 Plant 🖵 Control Room	
<b>Testing Method:</b> Simulate Alternate Path / Faulted: Yes No Perform	
Time Critical: 🖵 Yes 📕 No	
Estimated Time to Complete: 10 minutes Actual Time Used: minutes	
References:	
CPS 1893.04 FIRE FIGHTING.	

		NE	/v15101\ <u>: 01</u>	-
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed sat	tisfactorily? 🗖	Yes 🗖	No	
The operator's performance was evaluated a and has been determined to be:	gainst the standards ctory	contained in Unsatisfactory	this JPM, y	
Comments:	n an	ġĸġĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸĸ	ale a gran canad a gan da ang ang ang ang ang ang ang ang ang an	1993):::::::::::::::::::::::::::::::::::
				a sagan na sa
		······		
		<u></u>	<u></u>	
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Evolutor's Nerroy				
				Alfred de la
				موجعة بالمحتر ومقادة

# CLINTON POWER STATION

ADMIN JPM

### JPM NUMBER: RO A.4.1

### **REVISION: 01**

### 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.

### SIMULATOR SET-UP CONDITIONS:

None

### **TASK STANDARDS:**

The Fire Alarm has been sounded and the announcements made per CPS 1893.04 FIRE FIGHTING.

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

None

**PROCEDURAL/REFERENCES:** 

CPS 1893.04, FIRE FIGHTING

### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

Cue the candidate in an isolated area of the simulator. Let the student show where to locate the PA and radio base station, demonstrates how to us them, then take the student to an isolated location to complete the task in a quiet voice.

### **INITIAL CONDITIONS AND INITIATING CUE:**

- 1. The plant is operating at 100% power.
- 2. You are the 'B' Reactor Operator.
- 3. You have just received a call stating that there is a fire in the Paint and Oil Storage Room. Device #23-16 RW Paint and Oil Storage Rm WPS is alarming on the XL-3 panel.

4. Perform the Control Room actions.

5. Report when you have completed the task.

### **START TIME:**

Page 6 of 11

### JPM NUMBER: RO A.4.1

# REVISION: 01

# **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**

Step 1	Inform Shift Management of the FIRE.
Standard	The Control Room Supervisor or the Shift Manager has been notified.
CUE:	Acknowledge the report as Shift Management. Inform candidate there is no additional restrictions required
Comments	
	SAT UNSAT Comment Number
*Step 2	Sound the fire alarm and continue to sound the alarm at regular intervals until the fire is extinguished.
Standard	The fire alarm is initiated and silenced prior to making the Public Address Announcement.
Note	The fire alarm is initiated by depressing the fire alarm pushbutton on the Gaitronics Alarm Panel located on the desk in the Main Control Room.
Comments	Let the student show where to locate the PA, demonstrates how to us it.
	SAT UNSAT Comment Number

# JPM NUMBER: RO A.4.1

### **REVISION: 01**

*Step 3	Announce over the Public Address System:			
	Attention All Personnel!			
	Attention All Personnel!			
	There is a fire in the Paint and Oil Storage Room!			
	All personnel shall keep clear of the affected areas!			
	Fire Brigade operations and communications will be on the operations radio frequency and gaitronics; this frequency and gaitronics are now assigned for emergency fire ground use.			
Standard	Announcement is made using a Gaitronics phone in the Main Control Room			
Comments	Let the student show where to locate the PA, demonstrates how to us it, then take the student to an isolated location to complete the task in a quiet voice.			
	SAT UNSAT Comment Number			
*Step 4	Announce over the operations radio channel:			
na mara na mana na pana kana na gapa na kana da kilomo dina na kana kana mataja mataja ng Andrian Makajadaro (M Mara	Attention All Personnel!			
	Attention All Personnel!			
	There is a fire in the Paint and Oil Storage Room!			

All personnel shall keep clear of the affected areas!

Fire Brigade operations and communications will be on the operations radio frequency and gaitronics; this frequency and gaitronics are now assigned for emergency fire ground use.

Standard

Comments

Room. Let the student show where to locate the radio base station, demonstrates how to us it, then take the student to an isolated location to complete the task in a quiet voice.

Announcement is made using the radio on the desk in the Main Control

SAT UNSAT Comment Number

Page 8 of 11

# JPM NUMBER: RO A.4.1

# REVISION: 01

	Step 5	Any special instructions should also be announced over <u>both</u> communications systems.	
	Standard	Request from the CRS if there are any special instructions that need to be announced.	
ana Ang ang ang ang Ang ang ang ang ang Ang ang ang ang ang ang ang ang ang ang a	CUE	Report as the CRS that there are no special instructions to announce at this time.	
	Comments	See step one where the SM provided a response of no special instructions	
		SAT UNSAT Comment Number	
	Step 6	Start a fire pump	
	Standard	Operator reports that he would go back to the Fire Protection Panel and start a Fire Pump.	
	CUE	Report that Fire Pump is running.	
	Comments	Fire Pump would automatically start on low header pressure when fire suppression systems activate.	

SAT UNSAT Comment Number

Page 9 of 11

2204

# JPM NUMBER: RO A.4.1

REVISION: 01

Million ang sa Taraban panan kanpangan mang Milang sa Sang Sang Sang Sang Sang Sang Sang San	Step 7	Inform RP of any fire on site to evaluate potential radiological hazards.
	Standard	Operator calls RP to report the fire and its location.
	CUE	Acknowledge report of the fire.
in construction of the second se	Comments	
-		SAT UNSAT Comment Number
	Step 7	Refer to Appendices A, B & C and determine the appropriate safe shutdown method and/or manual actions that may be required.
	Standard	Determines from Appendix A Zone R-1N Safe Shutdown methods 1,2,3 and reports to Shift Management
te an an te da	CUE	Respond as Shift Management that Zone R-1N Safe Shutdown methods 1,2,3 apply
	Comments	
-		SAT UNSAT Comment Number
	TERMINATING CUE	S:
	Fire alarm initiated, Pub	lic Announcement for a fire made per CPS 1893.04
	STOP TIME:	

### JPM NUMBER: RO A.4.1

**REVISION: 01** 

Page 11 of 11

### **INITIATING CUE**

- 1. The plant is operating at 100% power.
- 2. You are the 'B' Reactor Operator.
- 3. You have just received a call stating that there is a fire in the Paint and Oil Storage Room. Device #23-16 RW Paint and Oil Storage Rm WPS is alarming on the XL-3 panel.
- 4. Perform the Control Room actions.
- 5. Report when you have completed the task.

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ES-301

Administrative Topics Outline

Form ES-301-1

	Facili	ity: <u>Clinton Power</u> S	tation	Date of Examination: 7/29/2002
	Exan	nination Level (circle	e one): <b>RO</b> / SRO	Operating Test Number: ILT0101-2
		Administrative Topic/Subject Description	Describe method of 1. ONE Administrativ 2. TWO Administrati	evaluation: /e JPM, OR /e Questions
	A.1	Conduct of Operations Fuel Handling	JPM - Perform Core K/A 2.1.31 Imp 4.2	Alteration Surveillance Log (faulted).
		Conduct of Operations Plant Parameter Verification	JPM - Determine if F Exceeded (fau K/A 2.1.19 Imp 3.0	ower, Flow or Core Thermal Limits have been lted).
	A.2	Equipment Control Surveillance Testing	JPM - Calculate Rea K/A 2.2.12 Imp 3.0	ctor Coolant System Leakage
	A.3	Radiation Control Radiation Work Permits	JPM - Entry requiren K/A 2.3.1 Imp 2.6	nents for a LHRA/Contaminated Area
	A.4	Emergency Plan Emergency Communications	JPM - Perform a Pla K/A 2.4.43 Imp 2.8	nt Assembly Announcement
L				
1	NRC SI	JBMITTAL COPY	21 c	of 26 NUREG-1021, Revision 8, Supplement
<b></b>				



CX2 Joph	)		<b>Exelun</b> Nuclear
$\bigcirc$		CLINTON POWER STAT	ION
		Job Performance Meas	ure
		JPM Number: RO A.1.b.	2
		Revision Number: 01	
		Date: 04/15/2002	
	Developed By:	C Ware	4/15/02
		Instructor	Date
	Validated By:	T Pickley	5/6/02
		SME or Instructor	Date
	Review By:	P. O'Brien	5/10/02
		<b>Operations Representative</b>	Date
	Approved By:	B> Price	5/21/02
		Training Department	Date

NRC SUBMITTAL COPY

# JPM NUMBER: 011298J001 REVISION: 01 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 through 11 below.

	1.	Task description and number, JPM description and identified.	nd number are
	2.	Knowledge and Abilities (K/A) references are incl	luded.
	3.	Performance location specified. (in-plant, control	room, or simulator)
	4.	Initial setup conditions are identified.	
	5.	Initiating and terminating cues are properly identi	fied.
	6.	Task standards identified and verified by SME re	view.
	7.	Critical steps meet the criteria for critical steps ar an asterisk (*).	nd are identified with
	8.	Verify the procedure referenced by this JPM mate current revision of that procedure: Procedure Rev Date	ches the most
	9.	Pilot test the JPM: a. Verify cues both verbal and visual are free of b. Ensure performance time is accurate.	conflict, and
<u></u>	10.	If the JPM cannot be performed as written with p then revise the JPM.	roper responses,
·	11.	When JPM is revalidated, SME or Instructor sign cover page.	and date JPM
SME / In	structo	or – Signature / Printed	Date
SME / In	structo	or – Signature / Printed	Date
SME / In	structo	or – Signature / Printed	Date

JPM NUMBER: 011298J001

**REVISION:** <u>01</u>

# **Revision Record (Summary)**

Revision	Date	Description
00	07/26/2001	This is a new RO Administrative JPM.
01	04/15/2002	Updated JPM with EPU (power uprate) information

Page 3 of 14

# CLINTON POWER STATION

				<b>REVISION:</b>
Operator's Name:			· · · · · · · · · · · · · · · · · · ·	
Job Title: 🗌 NLO	🗆 RO		🗆 STA	SRO Cert.
JPM Title: JPM Number: Revision Number: Task Number and Title:	Determine if 1 Exceeded – F 011298J001 01 011298C524	Power, Flow, or Ca aulted / Evaluate Core Th	ore Thermal Limit	ing Power
	Operations			
K/A Number Gen	eric 2.1.19	Ir	nportance 3.0	H Contraction of the second seco
Suggested Testing Envi	ronment:	Any Location Wh	ere References ar	e Available
Actual Testing Environ	ment:	Simulator [	] Plant	Control Room
Testing Method:	Simulate	Alternate Path	/Faulted:	
	Perform			
Time Critical:	Yes	No		
Estimated Time to Con	nolete: 13 mi	nutes Actu	al Time Used•	minutes
	L			minutes
Deferonces CDS 097	0.01 Dervier D:	atuiliantian Timita	egen an gran an an an a	
References: CPS 982 CPS 982	0.01, Power Di 0.01D001, Pow	stribution Limits ver Distribution Lin	nits Data Sheet	an a star a s
References: CPS 982 CPS 982 EVALUATION SUMM	0.01, Power Di 0.01D001, Pow	stribution Limits /er Distribution Lin	nits Data Sheet	− ,
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References:       CPS 982         CPS 982         EVALUATION SUMM         Were all the Critical Eler         The operator's performant         been determined to be:         Comments:	0.01, Power Di 0.01D001, Pow IARY: nents performed ice was evaluate	stribution Limits rer Distribution Lin d satisfactorily? ed against the stand Satisfactory	nits Data Sheet	□ No this JPM, and has factory
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References:       CPS 982         CPS 982         EVALUATION SUMM         Were all the Critical Eler         The operator's performan         been determined to be:         Comments:	0.01, Power Di 0.01D001, Pow IARY: nents performed ice was evaluate	stribution Limits rer Distribution Lin d satisfactorily? ed against the stand Satisfactory	nits Data Sheet	□ No this JPM, and has factory

### JPM NUMBER: 011298J001

#### **REVISION: 01**

### **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.

#### SIMULATOR SET-UP CONDITIONS:

Not Applicable

#### **TASK STANDARDS:**

- Perform CPS 9820.01, Power Distribution Limits with no deviation from the procedure.
- Identifies highest values of MFLCPR and MFLPD are > 1.0.

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

CPS 9820.01D001, Power Distribution Limits Data Sheet

#### **PROCEDURAL/REFERENCES:**

CPS 9820.01, Power Distribution Limits CPS 9820.01D001, Power Distribution Limits Data Sheet

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

### **INITIAL CONDITIONS AND INITIATING CUE:**

You are directed to perform the daily surveillance CPS 9820.01, Power Distribution Limits. Report when the task is complete.

START TIME:

## JPM NUMBER: 011298J001

### **REVISION: 01**

### **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**

982	0.01 Power	Distribution Limits
1	5.1	Notify Shift Management prior to performing procedure.
	Standard:	Notifies Shift Management prior to performing procedure. Enters start date, start time, and initials CPS 9820.01D001, Power Distribution Limits Data Sheet.
	Cue:	Acknowledge notification.
	Comments:	
		SAI UNSAI Comment Number
2	5.2	Verify Core Thermal Power is $\geq 21.6\%$ of RTP.
	Standard:	Verifies Core Thermal Power is $\geq 21.6\%$ of RTP by checking the 3D Case. Initials CPS 9820.01D001, Power Distribution Limits Data Sheet.
	Cue:	
	Comments:	3D Case has 99.9% Core Thermal Power.
		SAT UNSAT Comment Number

# CLINTON POWER STATION

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	<u>011298J001</u> REVISION: <u>01</u>
3 5.3	Check the applicable entry condition.
Standa	rd: Determines that the applicable entry condition is Daily Surveillance. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet
C	ue:
Comme	ats: The entry condition was given in the initiating cue.
	SAT UNSAT Comment Number
4 5.4	Verify 3D Case ID has an 'M' in 2nd character.
Standa	rd: Determines that second character of 3D CASE ID is an 'M'. Initials CPS 9820.01D001, Power Distribution Limits Data Sheet.
С	ue:
Comme	Its: CASE ID is FMLD1950708205855
	SAT UNSAT Comment Number
5 5.5	Check applicable RR pump status.
Standa	rd: Would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.
Standa	<ul> <li>rd: Would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.</li> <li>ue: Inform operator that 2 RR pumps are running.</li> </ul>
Standa C Commen	<ul> <li>would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.</li> <li>Inform operator that 2 RR pumps are running.</li> </ul>
Standa C Commer	<ul> <li>would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.</li> <li>Inform operator that 2 RR pumps are running.</li> </ul>
Standa C Commen	would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.ue:Inform operator that 2 RR pumps are running.nts:SATUNSATComment Number
Standa C Commer	rd:       Would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.         ue:       Inform operator that 2 RR pumps are running.         nts:       SAT         UNSAT       Comment Number
Standa C Commen	rd: Would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet. ue: Inform operator that 2 RR pumps are running. nts: SAT UNSAT Comment Number
Standa C Commen	rd: Would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet. ue: Inform operator that 2 RR pumps are running. nts: SAT UNSAT Comment Number Page 7 of 1

JP IVI		<u>.98J001</u> REVISION: <u>01</u>	
6	5.6	Check applicable 3D Case OPTION line items:	
		ARTS, DUAL LOOP, MANUAL FLOW, SINGLE LOOP	
	Standard:	Checks the 3D Case and determines that ARTS DUAL LOOP and MANU	ΔT
		FLOW boxes should be checked. Checks ARTS, DUAL LOOP, and MAN FLOW boxes on CPS 9820.01D001, Power Distribution Limits Data Sheet.	JAL
	Cue:		
	Comments:	This information is located to the right of OPTION on the 3D Case.	
		SAT UNSAT Comment Number	
7	8.2	From the 3D Case determine the highest MAPRAT value.	
		Initial CPS 9820.01D001 if MAPRAT $\leq$ 1.0.	
	en l'anna an <del>L</del> arden	i sui sus deven a multini nes devins seletati se as no fatta nest a su se sel innas a seconda a su se su astr	· .
	Standard:	Determines the highest MAPRAT value is 0.821. Initials CPS 9820.01D00 Power Distribution Limits Data Sheet.	1,
	Cue:		
	Comments:		
		SAT UNSAT Comment Number	

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Page 8 of 14

<b>*</b> ** ,	JPM (	NUMBER:011	ADMIN JPM 298J001 REVISION: 01
	*8	8.3	From the 3D Case determine the highest MFLCPR value.
	and a second	an a	Initial CPS 9820.01D001 if MFLCPR ≤ 1.0.
ana, bining ti bining Talam kanan di sara Anata kanan di sara		Standard:	Determines that the highest MFLCPR value is 1.003. Does not initial CPS 9820.01D001, Power Distribution Limits Data Sheet.
		Cue:	If asked about the 'Supplemental Review Sheet' notify examinee to use 9.1 or the bottom of the 9820.01D001.
		Comments:	Two locations have MFLCPR value > 1.0 (37-28 & 39-26)
			SAT UNSAT Comment Number
	*9	8.4	From the 3D Case determine the highest MFLPD value.
			Initial CPS 9820.01D001 if MFLPD ≤ 1.0.
		Standard:	Determines that the highest value of MFLPD is 1.002. Does not initial CPS 9820.01D001, Power Distribution Limits Data Sheet.
		Cue:	
		Comments:	One location has MFLPD value > 1.0 (17-22-18)
÷			
			SAT UNSAT Comment Number

		CLINTON POWER STATION ADMIN JPM
	NUMBER:011	<u>.298J001</u> REVISION: <u>01</u>
*10	8.5	Immediately contact Shift Management if any of the following conditions occur so that corrective action may be taken in accordance with the appropriate ITS:
		•MAPRAT is > 1.0.
		• MLCPR is $> 1.0$ .
		• MFLPD is $> 1.0$ .
	Standard: Cue: Comments:	Notifies Shift Management that MFLCPR and MFLPD are out of specification. Acknowledge notification.
		SAT UNSAT Comment Number
11	8.6	Notify Shift Management of surveillance completion.
	Standard:	Notifies Shift Management of surveillance completion. Enters stop date, stop time, and initials CPS 9820.01D001, Power Distribution Limits Data Sheet.
	Cue:	Acknowledge notification.
	Comments:	
		SAT UNSAT Comment Number

12	8.7	A copy o CPS 9820	f 3D Case used 0.01D001, Pow	shall be signed, dated, labeled "9820.01", and attached to ver Distribution Limits Data Sheet.
	Standard:	Attaches Power Di	a signed, dated istribution Lim	l, labeled copy of the 3D Case used to CPS 9820.01D001, its Data Sheet.
	Cue:			
	Comments:			
		SAT	UNSAT	Comment Number

Daily surveillance CPS 9820.01, Power Distribution Limits is complete.

STOP TIME:

K/A REFEREN	CE NUMBERS	Server and the server serve	
		Importan	ce Rating
K/A System Number	K/A Number	RO	SRO
Generic	2.1.19	3.0	3.0

JPM NUMBER: \_\_011298J001

# **REVISION: 01**

# **INITIATING CUE**

You are directed to perform the daily surveillance CPS 9820.01, Power Distribution Limits. Report when the task is complete.

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<b>^</b> -			CLINTO	N POWER S	TATION	an daga at ta	an An an
7	7DB / NTETR / T		1	ADMIN JPN	1		
		3ER: 011298JU	101	444		REVISION	: 01
	PAGE 1						
	CORE PARAME	TTTSS	CLINTON CYCLE	9 SEQU	ENCE NO 23 $III = 2002$ $III = 2002$		
	POWER MWT	2890.	PERIODIC LOG	0-0 8-J	UN-2002 17:	58 CALCULATED	
	POWER MWE	967.		CASE	ID FMLD195	60708205855	
	FLOW MLB/	HR 76.102	CALC RESULTS	REST	ART FMLD195	50708195845	
	SUBC BTU/	LB 23.49	Keff 1	.0000	SHAPE - FU	JLL CORE	یا میکند. است است از میکند است است است است و با با این میکند با این میکند است است. از میکند است است است است اس است است است است است است است است است است
	PR PSIa	1027.9	XE WORTH % -2	.52 LOAD	LINE SUMMA	ARY	
÷	CORE MWD/.	sT 20850.8 sT 8741.6	XE/RATED 1	.00 CORE	POWER	83.2%	
	MCPR	1.236		LOAD	LINE	90.0% 89.9%	
	·			,			
	CORRECTION	FACTOR: MFLCPR=	= 1.000 MFLPD=	1.000 MAP	RAT= 0.999	N N N N N N N N N N N N N N N N N N N	
	or rion. An	MOST LIMI	TING LOCATIONS	(NON-SYMME	RLIM- 1.24( TRIC)	)	
	MFLCPR LO	C MFLPD I	JOC MAPRA	r loc	PCRAT	LOC	
	1.003 37-3		22-18 0.821	7-28- 5	0.798	41-28-16	
	0.996 41-3	28 0.912 7- 28 0.912 41-	-28-5 0.817	11-22-13	0.798	19-28-16	
	0.973 11-2	28 0.902 19-	28-16 0.816	19-26-16	0.791	39-22-20	
and the second	0.940 13-	32 0.896 15-	38-18 0.813	19-30-15	0.782	9-22-13	a da a se managana ana a sa ang ang ang ang ang ang ang ang ang an
	0.939 9-2 0.937 11-	26 0.895 21- 20 0.893 17-	26-16 0.803	7-26-12	0.779	11-20-13 17-26-16	
	0.930 39-	22 0.889 9-	22-13 0.798	11-30-11	0.777	11-28-15	
	0.927 7-2	28 0.889 11-	20-13 0.796	9-26- 5	0.776	13-32-16	
	0.923 9-:	22 0.888 13-	32-16 0.795	39-22-20	0.774	47-26-12	
alasta da anto secono aspero	SEQ. B-2	C=MFLCPR D=MFL	PD M=MAPRAT P=1	PCRAT *=MUL	FIPLE CO	RE AVE AXTAL	
	53	· · · · · · · · · · · ·			NOTCH	I REL PW LOC	
	10			ander an and an extension of the state of th	00	0.238 25	
	L L				02	0.446 24	
	45	12	12		06	0.963 22	
	41		5		08	1.056 21	
	41 T.		P		10	1.158 20	
	37	12 10	C 10 12		14	1.163 18	
					16	1.182 17	
	33 T.				18	1.220 16	
	29				20	1.215 15 1.187 14	
					24	1.212 13	
	25				26	1.207 12	
	21	12 10	10 12		28	1.181 11 1 170 10	
			10 12		32	1.166 09	
	17	D			34	1.131 08	
	ц 13	12	12		36	1.085 07	
	10	10	12		40	1.050 05	
	09				42	0.998 04	
	L OS T	т т	M	Ŧ	44	0.920 03	
	04 08 1	12 16 20 24	28 32 36 40	44 48 5	2 48	0.237 01	
		·		-			
	CORE AVERAGE	E RADIAL POWER D		6	7		
·····	REL PW 0.89	0 1.084 1.113	1.102 1.155	1.145 0.7	27		
and the contraction of the second of the second			an a		an a transmission and a strategy of the	PAGE 2	

CLINTON CYCLE 9 INSTRUMENT READINGS/STATUS SEQUENCE NO 23 

· Forther and manufacturing implementations and the spectrum of the

# Page 13 of 14

<i>♀</i> → <b>JPM NUMBER:</b> 011298J001					1001		<b>REVISION:</b> <u>01</u>			
				CALIBR	ATED L	PRM RE	EADINGS	8-JUN-2002 17:58 CALCULATED		
	47D		40.1	49.8	55.7	45.9	30.2	CASE ID FMLD1950708205855		
	c		57.0	59.8	60.3	64.5	43.0	LPRM SHAPE - FULL CORE		
	В		61.2	63.6	60.9	69.2	41.9			
	A		51.1	54.9	49.5	63.0	27.7	# OF TIPS REJECTED: 1		
	39D	35.4	51.3	58.4	61.1	57.5	46.0	FAILED SENSORS:		
at and a second state of the second	C	55.8	62.7	60.3	59.6	66.5	67.9	LPRM ( 2 SIGNAL FAILED)		
	В	60.0	65.2	60.7	57.0	66.7	70.2	615A 3815D		
	А	52.7	61.1	50.4	44.4	54.7	63.8	LPRM ( 0 PANACEA REJECTED)		
								OTHER SENSORS ( 0 TOTAL)		
		39.9	51.6	55.8	56.0C	55.7	48.5	SUB RODS		
	С В	63.1	71.1	66.3	59.1	72.05	73 1	NONE		
	A	67.6M	69 0	61 1	45 4	72.9	71 8	T = TTP RIIN RECOMMENDED		
	**	07.011	0,010	01.1	10.1	/ 1 • 1	,1.0	C = MFLCPR LOCATION		
•	23D	40.0	54.3	58.1	57.9	59.5	48.0	M = MAPRAT LOCATION		
	С	62.2	67.3D	63.7	59.2	66.8	69.0	D = MFLPD LOCATION		
	в	67.1	67.1	61.4	56.9	66.6	71.1	P = PCRAT LOCATION		
	A	66.5	58.6	48.7	44.2	55.6	66.1	* = MULTIPLE LIMIT		
	15D	28.5	46.2	55.5	57.2	0.0	39.4			
	C	42.4	63.6	62.8	59.1	65.4	59.1			
	В	43.2	68.6	61.9	57.4	67.6	62.2			
	A	0.0	61.7	49.9	44.3	64.3	50.4			
	07D		29.1	39.3	40.7	36.6		•		
	C		41.4	58.6	56.6	54.5				
			42.3	64.8	61.8	58.3				
	A		31.2	57.2	55.6	48.4				
		06	14	22	30	38	46			
	CORE	STIMMAT	v							
COF	RE POW	ER 8	3.2%	CALC	SUB FL	OW	91.3%	DP MEAS PSI 15.52		
COH	RE FLO	W 90	0.0%	OPER	SUB FL	OW	-1.2%	DP CALC PSI 20.52		
LOA	AD LIN	E 89	9.9%	FLOW	BASIS		MEAS	FEEDWTR FLOW MLB/HR 12.35		
	APRM	CALTR	RATTON							
		A	В		С	D				
REA	ADING	83.7	83	. 9	83.5	83.5	5			
AGA	AF	0.994	0.9	92 0	.997	0.997	1			
	TIP	RUNS RI	ECOMME	NDED						
STI	RINGS:		NONE							
								· · · · · · · · · · · · · · · · · · ·		

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# **CLINTON POWER STATION** Job Performance Measure JPM Number: RO A.1.a.2 **Revision Number: 00** Date: 04/16/2002 Developed By: C Ware 4/16/02 Instructor Date Validated By: T Pickley 5/6/02 SME or instructor Date Review By: P. O'Brien 5/10/02 **Operations Representative** Date Approved By: B. Price 5/21/02 **Training Department** Date

# NRC SUBMITTAL COPY

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# CLINTON POWER STATION ADMIN JPM JPM NUMBER: <u>RO A.1.a.2</u> REVISION: <u>00</u> 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 through 11 below.

1.	Task description and number, JPM description a identified.	and number are
2.	Knowledge and Abilities (K/A) references are inc	cluded.
3.	Performance location specified. (in-plant, contro	l room, or simulator)
4.	Initial setup conditions are identified.	
5.	Initiating and terminating cues are properly ident	tified.
6.	Task standards identified and verified by SME re	eview.
7.	Critical steps meet the criteria for critical steps a an asterisk (*).	and are identified with
<b>.</b>	Verify the procedure referenced by this JPM ma current revision of that procedure: Procedure Rev Date	tches the most
9.	Pilot test the JPM: a. Verify cues both verbal and visual are free of b. Ensure performance time is accurate.	conflict, and
10.	If the JPM cannot be performed as written with p then revise the JPM.	proper responses,
11.	When JPM is revalidated, SME or Instructor sigr cover page.	n and date JPM
•		
SME / Instructo	or – Signature / Printed	Date
SME / Instructo	or – Signature / Printed	Date
SME / Instructo	or – Signature / Printed	Date

Page 2 of 12

# JPM NUMBER: \_\_\_\_\_RO A.1.a.2

**REVISION:** <u>00</u>

# **Revision Record (Summary)**

00	04/16/2002	This is a new RO Administrative JPM.
Revision	Date	Description

Page 3 of 12

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JEWI NUMIDER: <u>K</u>	<u> </u>		<b>REVISION:</b> <u>00</u>	
Operator's Name:		· .		
Job Title: 🗌 NLO	□ RO □	SRO 🗆 STA	SRO Cert.	
JPM Title:	Determine if Fuel Mov	ement Can Continue (	One SRM	
JPM Number: Revision Number: Task Number and Title:	Reading < 3 cps) – Fau ILT0101-RO-A.1.a.2 00 900003.01 / Complete Alteration Surveillance	lted Control Room Actions Log	s to Perform the Core	
K/A Number Gene	eric 2.1.31	Importance	4.2	
Suggested Testing Envir	ronment: Simulato	r		
Actual Testing Environr	ment: 🗆 Simulato	r 🗌 Plant	Control Room	
Testing Method:	Simulate Alter Perform	nate Path / Faulted:	■ Yes □ No	
Time Critical:	Yes 📕 No			
Estimated Time to Com	plete: <u>15 minutes</u>	Actual Time Used	I: minutes	
References. CPS 3703	3 01 Core Alterations	n a companya a sa	nu manana aka aka waka kata una una una bina na manana ina bi	
CPS 9000	0.01D002, Control Room	Surveillance Log - N	Iode 4, 5 Data Sheet	*
CPS 9000	0.03, Core Alteration Sui	veillance Log		
EVALUATION SUMM	ARY:			
Were all the Critical Elem	ients performed satisfact	orily? 🗌 Yes	□ No	
The operator's performance been determined to be:	ce was evaluated against	the standards contained ory D' Ur	ed in this JPM, and has usatisfactory	
Comments:				
······································				
i				
Evaluator's Name:				
#### JPM NUMBER: <u>RO A.1.a.2</u>

**REVISION: 00** 

#### **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.

#### SIMULATOR SET-UP CONDITIONS:

Place simulator in a S/D or Refuel IC. Verify that the Mode Switch is locked in Refuel with key removed. Verify that all control rods are fully inserted. I/O so SDC apears Linedup return to the fuel pool. Withdraw SRM 'D' untill it reads less than 3 counts, override the retract not permitted alarm, stick the D SRM and I/O the SRM "in" light on when the retract power pushputton is depressed. Replicate communication setup between the Control Room and refuel platform.

#### TASK STANDARDS:

- Perform CPS 9000.03, Core Alteration Surveillance Log with no deviation from the procedure.
- Determines that data does not meet the acceptance criteria and reports this to Shift Management.

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

CPS 9000.01D002, Control Room Surveillance Log – Mode 4, 5 Data Sheet (only Step 8.4.1 page with partially filled in information)

CPS 9000.03, Core Alteration Surveillance Log

#### **PROCEDURAL/REFERENCES:**

CPS 3703.01, Core Alterations CPS 9000.01D002, Control Room Surveillance Log – Mode 4, 5 Data Sheet CPS 9000.03, Core Alteration Surveillance Log

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### INITIAL CONDITIONS AND INITIATING CUE:

The reactor plant is in Mode 5. Core alterations are in progress in the North East quadrant. Thirty-five bundles are installed in the quadrant. Shift turnover is occurring. You have assumed the watch on Day shift. You are directed to perform CPS 9000.03, Core Alteration Surveillance Log before the next bundle is moved. Report when the task is complete.

START TIME:

# JPM NUMBER: RO A.1.a.2

**REVISION: 00** 

#### **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**

9000	9000.03 Core Alteration Surveillance Log							
1	5.2	Notify Shi	Notify Shift Management of the start of this test.					
	Standard: Cue: Comments:	Notifies Sł Acknowled	nift Managemo dge notificatio	ent of the start of this test. n.				
		SAT	UNSAT	Comment Number				
2	<b>8.1</b> .	<ul> <li>Verify the</li> <li>Prior to</li> <li>Prior to</li> <li>ALTEI</li> <li>Therea 2.1.2),</li> </ul>	following che o CORE ALT o resuming CO RATIONS MO fter, perform s and steps 8.1.	cks are current: ERATIONS; and DRE ALTERATIONS following an exit from the CORE DDE. steps 8.1.1, 8.1.2, 8.1.3 and 8.1.4 shiftly (refer to step 5 and 8.1.6 daily.				
	Standard: Cue:	Determines	s that steps 8.1	.1, 8.1.2, 8.1.3, and 8.1.4 need to be completed.				
	Comments:	Initiating cue provided that core alterations are in progress and the shift is Day Shift.						
·		SAT	UNSAT	Comment Number				

# JPM NUMBER: RO A.1.a.2

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**REVISION:** <u>00</u>

		NOTE Steps 8.1.1 through 8.1.6 may be performed concurrently or in any logical order.
3	8.1.1	Reactor Mode Selector Switch is locked in the Refuel Position (with the key removed).
	Standard:	Verifies Reactor Mode Selector Switch is locked in the Refuel Position (with the key removed).
	Comments:	
		SAT UNSAT Comment Number
4	8.1.2	SAT UNSAT Comment Number All Control Rods are fully inserted.
4	8.1.2 Standard: Cue: Comments:	SATUNSATComment NumberAll Control Rods are fully inserted.Verifies all Control Rods are fully inserted.

JPM NUMBER: RO A.1.a.2

**REVISION:** <u>00</u>

*5	8.1.3	Verify operability of the required SRMs.
		1. Verify SRM portion of CPS 9000.01D002, Control Room Operator Surveillance Log - Mode 4, 5 Data Sheet is current for the SRMs required to satisfy the sub-step 2 below.
	Standard:	Determines that SRM 'D' is reading downscale (less than 3 cps). Notifies Shift Management that SRM 'D' is less than 3 cps.
	Cue:	Inform examinee that they will need to complete the SRM portion (Step 8.4.1) of CPS 9000.01D002, Control Room Operator Surveillance Log - Mode 4, 5 Data Sheet and hand the examinee the sheet from CPS 9000.01D002.
		Acknowledge Shift Management notification.
	Comments:	Shift Management notification (CPS 9000.03 Limitation 6.2). The examinee may complete the entire CPS 9000.03 Step 8.1.3 prior to making the notification.
n na partica de la casa parte	د. د. د. د. د. د. د. و زو و زو د. د. د. د. د. د.	
(i)	nteri norren onregenden den serek	SAT UNSAT Comment Number

JPM NUMBER: RO A.1.a.2

*6	8.1.3	Verify operability of the required SRMs.
		2. Verify an OPERABLE SRM detector is located in:
		2. The core quadrant where CORE ALTERATIONS are being performed when the associated SRM is included in the fueled region; and
	Standard:	Determines that SRM 'D' is in the same quadrant as core. Notifies Shift Management that SRM 'D' is located in same quadrant as core alterations.
	Cue:	Acknowledge Shift Management notification.
	Comments:	Shift Management notification (CPS 9000.03 Limitation 6.2). The examinee may complete the entire CPS 9000.03 Step 8.1.3 prior to making the notification.
		SAT UNSAT Comment Number
7	8.1.3	SAT UNSAT Comment Number Verify operability of the required SRMs.
7	8.1.3	<ul> <li>SAT UNSAT Comment Number</li> <li>Verify operability of the required SRMs.</li> <li>2. Verify an OPERABLE SRM detector is located in:</li> </ul>
7	8.1.3	<ul> <li>SAT UNSAT Comment Number</li> <li>Verify operability of the required SRMs.</li> <li>2. Verify an OPERABLE SRM detector is located in:</li> <li>3. A core quadrant, adjacent to where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region.</li> </ul>
7	8.1.3 Standard:	<ul> <li>SAT UNSAT Comment Number</li> <li>Verify operability of the required SRMs.</li> <li>Verify an OPERABLE SRM detector is located in: <ol> <li>A core quadrant, adjacent to where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region.</li> </ol> </li> <li>Determines that adjacent quadrants have operable SRMs.</li> </ul>
7	8.1.3 Standard: Cue:	SAT       UNSAT       Comment Number         Verify operability of the required SRMs.         2. Verify an OPERABLE SRM detector is located in:         3. A core quadrant, adjacent to where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region.         Determines that adjacent quadrants have operable SRMs.
7	8.1.3 Standard: Cue: Comments:	<ul> <li>SAT UNSAT Comment Number</li> <li>Verify operability of the required SRMs.</li> <li>Verify an OPERABLE SRM detector is located in: <ol> <li>A core quadrant, adjacent to where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region.</li> </ol> </li> <li>Determines that adjacent quadrants have operable SRMs.</li> </ul>
7	8.1.3 Standard: Cue: Comments:	SAT       UNSAT       Comment Number         Verify operability of the required SRMs.       .         2. Verify an OPERABLE SRM detector is located in:       .         3. A core quadrant, adjacent to where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region.         Determines that adjacent quadrants have operable SRMs.
7	8.1.3 Standard: Cue: Comments:	SAT       UNSAT       Comment Number         Verify operability of the required SRMs.       .         2. Verify an OPERABLE SRM detector is located in:       .         3. A core quadrant, adjacent to where CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region.         Determines that adjacent quadrants have operable SRMs.

* * ********	JPM	NUMBER: R	CLINTON POWER STATI ADMIN JPM D A.1.a.2	ON REVISION: 00
	8	8.1.4	Verify direct communication between the personnel during CORE ALTERATIONS with their normal drive system.	Control Room and the refuel platform S, except during movement of control rods
		Standard:	Verifies direct communication between the personnel during CORE ALTERATIONS	he Control Room and the refuel platform
ağııları sını oları roma a	·····	Cue:	Acknowledge communication verification	n. Sasana ya mana ana ana ana ana ana ana ana ana a
		Comments:	Initiating cue provided that core alteration	ns are in progress.
e'				
			SAT INSAT Comment N	imher

5 .* 	JPM NUMBER	: _ RO A.1.	<b>REVISION:</b> <u>00</u>			
	11 8.2	(Reco	ord) Finish time	of CPS 9000.03.	****	••••••••••••••••••••••••••••••••••••••
	Stai	ndard: Reco Cue: nents:	rds finish time o	f CPS 9000.03.		
Sant Balance Communication 1993		SAT	UNSAT	Comment Number		
		· · ·	·····	· · · · · · · · · · · · · · · · · · ·		

# **TERMINATING CUES:**

CPS 9000.03, Core Alteration Surveillance Log is complete. Shift Management notified that data does not meet the acceptance criteria

#### STOP TIME:

K/A REFEREN	CE NUMBERS		
		Importan	ce Rating
K/A System Number	<u>K/A Number</u>	RO	SRO
Generic	2.1.31	4.2	3.9

.....

# CLINTON POWER STATION

ADMIN JPM

JPM NUMBER: RO A.1.a.2

**REVISION: 00** 

#### **INITIATING CUE**

The reactor plant is in Mode 5. Core alterations are in progress in the North East quadrant. Thirty-five bundles are installed in the quadrant. Shift turnover is occurring. You have assumed the watch on Day shift. You are directed to perform CPS 9000.03, Core Alteration Surveillance Log before the next bundle is moved. Report when the task is complete.

SCOPE OF REVISION	:		
• Periodic review an	d format update.		
<ul> <li>Revised required R ITS Amendment 133.</li> </ul>	PV water level for	step 8.1.5 from 23 ft. 1	:0 22 ft. 8 in. per
<ul> <li>Revised old step 8 Shift Management re</li> </ul>	.2 (now 8.2 and 8.3 eview shiftly.	) to record time of comp	oletion and documen
	CONTINL	IOUS USE	
ORIGINATOR: Day	id W. Reeser	CLASS COL	e: SNNN
ITR: Ton	nas I. Landin	APPROVAL DAT	E: OCT 13 2000
CURRENT CHANGES TO GEN	TERAL REVISION		



Sec. Bak

CORE ALTERATIONS MODE: inclusive combination of plant conditions which satisfy Technical Specifications for performing Core Alterations.

14 M 16

CPS 9000.03 MIDS/DAYS/SWINGS 8.0 PROCEDURE Date: 🗶 XX:XX Time: 8.1 Verify the following checks are current: • Prior to CORE ALTERATIONS; and Prior to resuming CORE ALTERATIONS following an exit from the CORE ALTERATIONS MODE. • Thereafter, perform steps 8.1.1, 8.1.2, 8.1.3 and 8.1.4 shiftly (refer to step 2.1.2), and steps 8.1.5 and 8.1.6 daily. NOTE Steps 8.1.1 through 8.1.6 may be performed concurrently or in any logical order. 8.1.1 Reactor Mode Selector Switch is locked in 0 the Refuel Position (with the key removed). «LBD-2» All Control Rods are fully inserted. «LBD-3» 8.1.2 0 8.1.3 Verify operability of the required SRMs. «LBD-1» Verify SRM portion of CPS 9000.01D002, 1. 0 Control Room Operator Surveillance Log - Mode 4,5 Data Sheet is current for the SRMs required to satisfy the sub-step 2 below. Verify an OPERABLE SRM detector is 2. located in: 1. The fueled region; and 2. The core quadrant where CORE ALTERATIONS are being performed when the associated SRM is included in the fueled region; and A core quadrant, adjacent to where 3. CORE ALTERATIONS are being performed, when the associated SRM is included in the fueled region. 5 of 7 Page Rev.

### 9.0 ACCEPTANCE CRITERIA

### 9.1 Operability Requirements

#### NOTE

Failure to meet the Acceptance Criteria shall constitute a failure to comply with the applicable LCO. ITS should be immediately reviewed to identify Action Statements needed for implementation. Refer to Supplemental Review Sheet for applicable LCOs.

- 9.1.1 Items in section 8.0 of CPS 9000.03 are satisfactory.
- 9.2 Other Requirements None
- 10.0 **FINAL CONDITIONS** None
- 11.0 REFERENCES
- 11.1 Licensing Basis Documents 11.1.1 LBD-1: SR 3.3.1.2.2 (8.1.3) 11.1.2 LBD-2: SR 3.9.2.1 (8.1.1) 11.1.3 LBD-3: SR 3.9.3.1 (8.1.2) 11.1.4 LBD-4: SR 3.9.6.1 (8.1.5) 11.1.5 LBD-5: SR 3.9.7.1 (8.1.6)
- 11.1.6 LBD-6: ORM TR 4.6.2 (8.1.4)
- 11.2 **Procedures**

CPS 3007.01, Preparation For And Recovery From Refueling Operations

- 11.3 Design/Vendor/Print/Other -- None
- 11.4 **Commitments**

CM-1: SOER 82-01, Radiation Overexposure of Maintenance Personnel

Page 7 of 7

- 12.0 APPENDICES None
- 13.0 **DOCUMENTS** None

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Rev.



Rev. 35b

#### CONTROL ROOM SURVEILLANCE LOG - MODE 4, 5

MON	TUE	WED	THU	FRI	SAT	SUN
	TODAY					

CPS 9000.01D002

# 8.4 INSTRUMENTATION

#### 8.4.1 Source Range Monitors (SRM)

#### • SRM Comparison Guideline:

3 to 500 cps when all rods are inserted.

If a channel is > 500 cps, refer to CPS 1401.09 to evaluate channel operability.

1. MODE 4 [DAYs only]

	a) Record/V Use DCS Verify S (≥ 2 c (ITS S	erify ≥ 3.0 cps. Display. RMs full in. channels) R 3.3.1.2.4 T1)	<u>SRM Channel</u> A B C D	MA cps cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps
	b) (Initial • 1H13- (ITS SR	) Channel Check S -P678 • DCS (1 3.3.1.2.3 T1)	RM indications. flux & period)	x/1A /x	x/ /x	x/ /x	x/ /x	x/ /x	x/ /x	x/ /x
2.	MODE 5 [Shi	ftly]								<b>ل</b>
	a) Record/V Use DCS Verify S (≥ 2 c (ITS S	erify ≥ 3.0 cps. Display. RMs full in. hannels) R 3.3.1.2.4 T1)	<u>SRM Channel</u> Mids A Mids B Mids C Mids D	$\frac{38}{22} \text{ cps}$ $\frac{49}{27} \text{ cps}$	22 cps 17 cps 16 cps 6 cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps
	D) Record/V Use DCS Verify S (≥ 2 c (ITS S)	erify ≥ 3.0 cps. Display. RMs full in. channels) R 3.3.1.2.4 T1)	<u>SRM Channel</u> Days A Days B Days C Days D	27 cps 19 cps 38 cps 20 cps	cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps
	C) Record/V Use DCS ( Verify S) (≥ 2 c (ITS S)	erify ≥ 3.0 cps. Display. RMs full in. hannels) R 3.3.1.2.4 T1)	<u>SRM Channel</u> Swings A Swings B Swings C Swings D	$\begin{array}{c} 24 \\ \hline 21 \\ \hline cps \\ \hline 19 \\ \hline cps \\ \hline 6 \\ \hline cps \end{array}$	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps	cps cps cps cps
	d) (Initial) • 1H13- (ITS SR )	) Channel Check S P678 • DCS (f 3.3.1.2.1 T1)	RM indications. Lux & period)	~ Wit	wed 1 1	/ /	1 1	/ /	1 1	/ /

#### Rev. 35b





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		CLINTON POWER ST	ATION
editedrations request and residence from mo	·	Job Performance Me	easure
		JPM Number: RO A	.2.2
		Revision Number:	00
		Date: 04/24/2002	
	Developed By:	Paul M. Higginbotham Instructor	_4/24/02_ Date
	Validated By:	T Pickley SME or Instructor	5/6/02 Date
	Review By:	P. O'Brien Operations Representative	<u>5/10/02</u> Date
	Approved By:	B. Price Training Department	<u>5/21/02</u> Date

NRC SUBMITTAL COPY

RO A.2.2

**JPM NUMBER:** 

# 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 through 11 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, or simulator)
- 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues 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 referenced by this JPM matches the most current revision of that procedure:
      - Procedure Rev. \_\_\_\_ Date \_\_\_\_\_
    - Pilot test the JPM:
       a. verify cues both verbal and visual are free of conflict, and
       b. ensure performance time is accurate.
    - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
    - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor	 Date	
SME/Instructor	Date	
SME/Instructor	 Date	<u>.</u>

#### CLINTON POWER STATION ADMIN JPM RO A.2.2

JPM NUMBER:

REVISION: 00

# **Revision Record (Summary)**

1. **Revision 00**, This is a new JPM

and the second second

Page 3 of 17

CLINTON POWER STATION
ADMIN JPMJPM NUMBER:RO A.2.2REVISION:00
Operator's Name: Job Title: RO
JPM Title: Calculate Reactor Coolant System Leakage JPM Number: RO A.2.2 Revision Number: <u>00</u>
Task Number and Title: 900001.01, Complete Control Room Actions to Perform the Control Room Surveillance Log
K/A Number: A2.2.12 Importance 3.0
Suggested Testing Environment: Simulator
Actual Testing Environment:  Simulator  Plant  Control Room
Testing Method: □ Simulate Alternate Path / Faulted: □ Yes ■ No ■ Perform
Time Critical: 🛛 Yes 🔳 No
Estimated Time to Complete: <u>20</u> minutes Actual Time Used: minutes
<b>References:</b> CPS 9000.01, CONTROL ROOM SURVEILLANCE LOG, Revision 33 CPS 9000.01D001, CONTROL ROOM SURVEILLANCE LOG -

MODE 1, 2, 3, DATA SHEET, Revision 46, Section 8.10

JPN	I NUMBER:	CLIN <sup>4</sup> <b>RO A.2.2</b>	TON POWER STAT ADMIN JPM	ION	VISION: 00	)
EVA Wer	LUATION SU	MMARY: Elements perfe	ormed satisfactorily?	🗅 Yes 🛛	 ] No	
The and I	operator's perfor has been determi	mance was ev ned to be:	aluated against the st <ul> <li>Satisfactory</li> </ul>	andards contain	ed in this JPM, factory	
Com	ments:					
  Eval	nator's Name			•••••		·
Eval	uator's Signature	): 		Date		-

#### JPM NUMBER: RO A.2.2

**REVISION: 00** 

#### 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.

#### SIMULATOR SET-UP CONDITIONS:

Initialize in a Mode 1 IC.

Turn the recorders OFF.

Present the attached, completed copy of CPS 9000.01D001, Control Room Surveillance Log – Mode 1, 2, 3 Data Sheet, Section 8.10.2 to the examinee for calculation of DW Floor Drain Sump Flow Rate.

#### TASK STANDARDS:

Reactor Coolant Leakage verification and calculation has been performed per CPS 9000.01D001, Control Room Surveillance Log – Mode 1, 2, 3 Data Sheet, Section 8.10.

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

#### None

#### **PROCEDURAL/REFERENCES:**

CPS 9000.01, CONTROL ROOM SURVEILLANCE LOG, Revision 33 CPS 9000.01D001, CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3, DATA SHEET, Revision 46, Section 8.10

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### INITIAL CONDITIONS AND INITIATING CUE:

It is 16:00 hrs on the Swing shift and CPS 9000.01D001, Control Room Surveillance Log – Mode 1, 2, 3, is in progress. The CRS has directed you to perform verification and calculation of Reactor Coolant leakage, Drywell Floor Drain Sump section, using CPS 9000.01D001, Control Room Surveillance Log – Mode 1, 2, 3.

Other operators are performing the remaining sections of CPS 9000.01D001.

#### **START TIME:**

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#### JPM NUMBER: RO A.2.2

# **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 9000.01D001	
*1.	Locate Drywell Floor Drain flow recorders and totalizers at 1H13-P855.
Standard	Proceeds to P855 and locates DW FLR DRN FLOW recorders and totalizers.
CUE	If asked, recorders 1E31-R551 and 1E31-R552, and the totalizers are operable.
Comments	The recorders are de-energized to allow the evaluator to provide values from the recorders and totalizers when asked.
· · · · · · · · · · · · · · · · · · ·	SAT UNSAT Comment Number

<u>*2. 8.10.1.b</u>	Record DW FLR FLOW FROM SUMP TOTAL.						
Standard	Obtains value from totalizer and records per 8.10.1.b).						
CUE	When asked, DW FLR FLOW FROM SUMP TOTAL is reading 054307.						
Comments							
	SAT UNSAT Comment Number						
*3. 8.10.2.c	Record DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1.						
Standard	Obtains value from 1E31-R552, Channel 1 and records per 8.10.2.c).						
CUE When asked, cue that 1E31-R552, Channel 1 is reading 2.3.							
Comments	1E31-R552, Channel 1 is preferred source.						
	SAT UNSAT Comment Number						

#### JPM NUMBER: RO A.2.2 **REVISION: 00** Verify current DW Floor Drain flow is within limits and initial applicable 8.10.2.d 4. =8.10.2.e space per 8.10.2.d and 8.10.2.e. Standard Compares DW Floor Drain flow reading from 8.10.2.c with limits stated in 8.10.2.d and 8.10.2.e. Determines the stated limits have not been exceeded. CUE Comments SAT UNSAT Comment Number \*5. 8.10.3.b Perform Unidentified Leakage calculation per 8.10.3: b. Record current value of DW FLR FLOW SUMP TOTAL from 8.10.1.b Standard The current value of DW FLR FLOW SUMP TOTAL from 8.10.1.b is recorded in the appropriate space. CUE Comments Should record 054307 SAT UNSAT Comment Number

*6	8.10.3.c	Record	Record the value of DW FLR FLOW SUMP TOTAL taken ~24 before					
Standa	ard	The valu in the ap	ue of DW FI propriate sp	LR FLOW SUMP TOTAL taken ~24 before is recorded pace.				
CUE								
Comm	ients	Should record 051043						
		SAT	UNSAT	Comment Number				
*7.	8.10.3.d)	Record	total numb	er of gallons by subtracting c) from b).				
Standa	ırd	Performs 054307 – 051043 and records 3264						
CUE								
Comm	ients	Should record 3264 gal						
		SAT UNSAT Comment Number						

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# JPM NUMBER: RO A.2.2

**REVISION:** <u>00</u>

*8.	8.10.3.e)	Record the number of minutes since reading ~24 hours before (from 8.10.3.c)
Stan CUE	dard	The number of minutes since reading of $\sim 24$ hrs before is recorded.
Com	ments	Should record 1440 min
<u> </u>		SAT UNSAT Comment Number
*9.	8.10.3.f)	Record flow rate since last reading: Reading from d) divided by elapsed time e)
Stan CUE	dard	Performs 3264 $\div$ 1440 and records 2.27 gpm in the appropriate space
Com	ments	Should record 2.27 gpm
		SAT UNSAT Comment Number
10.	8.10.3.g)	Record the DW FLR DRN (SUMP) FLOW, LOW RANGE from Recorder 1E31-R552, Channel 1.
Stan	dard	Records 2.3 in the appropriate space.
CUE	· · · · · · · · · · · · · · · · · · ·	If asked to confirm, cue that 1E31-R552, Channel 1 reading is 2.3
Com	ments	Examinee may request confirmation that 1E31-R552, Channel 1 reading is 2.3, or may enter value from 8.10.2.c).
		SAT UNSAT Comment Number
11.	8.10.3.h	Record the DW FLR DRN (PUMP) FLOW, LOW RANGE from Recorder 1E31-R551, Channel 1.
Stand	dard	Locates 1E31-R551Channel 1 and requests current value.
		Records the cued value in the appropriate space.
CUE		When asked, cue that Recorder 1E31-R551, Channel 1 is reading 2.3
Com	ments	
		SAT UNSAT Comment Number

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### JPM NUMBER: RO A.2.2

**REVISION:** <u>00</u>

12. 8.10.3.i)	Perform Channel Check of the calculated DW Floor Drain Sump flow rate [Step f) above] and DW FLOOR DRAIN (SUMP) and (PUMP) FLOW rates [from g) and h) above]. Enter initials in appropriate space.					
	Comparison Guideline: 1.4 gpm					
Standard	Compares flow value calculated in 8.10.3.f) with values obtained from recorders 1E31-R552 and 1E31-R551 in 8.10.e.g) and 8.10.3.h).					
	Determines the Comparison Guideline of 1.4 gpm has not been exceeded.					
	Enters initials in the appropriate space.					
CUE						
Comments						
	SAT UNSAT Comment Number					

# **TERMINATING CUES:**

DW Floor Drain leakage calculations are completed and determination made that no unidentified leakage limits have been exceeded.

STOP TIME:

### JPM NUMBER: RO A.2.2

**REVISION:** <u>00</u>

# K/A REFERENCE NUMBERS

# K/A SYSTEM NUMBERK/A NUMBERROSROGENERIC $\frac{K/A \text{ NUMBER}}{2.2.12}$ $\frac{3.0}{3.0}$ $\frac{3.0}{3.4}$

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#### JPM NUMBER: RO A.2.2

**REVISION: 00** 

#### **INITIATING CUE**

It is 16:00 hrs on the Swing shift and CPS 9000.01D001, Control Room Surveillance Log – Mode 1, 2, 3, is in progress. The CRS has directed you to perform verification and calculation of Reactor Coolant leakage, Drywell Floor Drain Sump section, using CPS 9000.01D001, Control Room Surveillance Log – Mode 1, 2, 3.

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Other operators are performing the remaining sections of CPS 9000.01D001.

lastpage

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8.10

#### **CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3**

#### CPS 9000.01D001 MON TODAY WED THU FRI SAT SUN

NOTE

CPS 4001.01, Reactor Coolant Leakage shall be entered if any of the following leakage rates are observed:

- Any ITS LCO 3.4.5 RCS Operational LEAKAGE limitation is exceeded.
- Unidentified LEAKAGE increase of  $\geq 0.5$  gpm in a 4 hour period (1.0 gpm in 8 hours).
- Unidentified LEAKAGE exceeds 2.5 gpm.

REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE

Flow Readings From 1H13-P855 1. (Record)

(at  $\approx$  8 hour intervals)

a) Time readings taken

- b) DW FLR FLOW FROM SUMP TOTAL (ITS LCO 3.4.5 (a)) If the Sump (bubblier level) Flow Detector totalizer in step 8.10.1.b is not functioning, use alternate Pump (magnetic motor) Flow Detector totalizer data in step 8.10.1.c for unidentified leakage calculations
- c) DW FLR FLOW PMP DISCH TOTAL (ITS LCO 3.4.5 (a))

# d) DW EQUIP FLOW

(ITS LCO 3.4.5 (a))

If DW Equip Flow Totalizer is not functioning, a Manual Determination of DW RE In-Leakage Flow Rate shall be performed using methodology described in CPS 3315.02, Leak Detection (LD) S and recorded in step 8.10.4.g.1.

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D       0800       0800       0800       Image: constraint of the state of the st	М	0000	0005			
S       1600       1600       Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: center;">Image: style="text-align: style="text-align: center;">Image: style="text-align: center;"/>	D	0800	0800			
M       048931       052009       Image: Constraint of the second seco	S	1600	1600			
M       048931       052009       Image: Constraint of the second seco				 	 	
D       049987       053155	М	048931	052009			
S       051043	D	049987	053155			
M     NA     NA       D     NA     NA       S     NA     Image: Second secon	S	051043				
M     NA     NA       D     NA     NA       S     NA     Image: Second secon						
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#### Rev. 46

**REVISION: 00** 

#### **CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3**

**REVISION: 00** 

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8.10

#### REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE (cont'd)

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TODAY

- <u>DW Floor Drain Sump Flow Rate Verifications</u> (at ≈ 8 hour intervals)
  - a) Check instrument used:

If the preferred DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1 is not functioning, use the alternate DW FLR DRN (PUMP) FLOW, LOW RANGE, 1E31-R551, Channel 1.

- b) (Record Monday only) Enter the DW FLR DRN FLOW, LOW RANGE values from Sunday. (From step 8.10.2.c)
- c) (Record) Enter the DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1, <u>or</u> alternate
   DW FLR DRN (PUMP) FLOW, LOW RANGE

1E31-R551, Channel 1.

- d) (Initial) (MODE 1) Verify current DW Floor Drain/ flow rate is ≤ 2 gpm above any reading of the previous 24 hours. (ITS SR 3.4.5.1)
- e) (Initial) Verify  $\leq$  5 gpm on DW FLR DRN (SUMP) FLOW, LOW RANGEM 1E31-R552 Channel 1 <u>or alternate</u> D DW FLR DRN (PUMP) FLOW, LOW RANGE 1E31-R551, Channel 1. (ITS SR 3.4.5.1) S

X SUMP	X SUMP	□ SUMP □ PUMP				
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	<b></b>				
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D	2.2	2.3			
S	2.2				
М	DS	DS			
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S	JG				
EM	DS	DS			
D	BR	BR			
S	JG				

#### **REVISION: 00**

# CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3

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MON	TODAY	WED	THU	FRI	SAT	SUN

#### 8.10 REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE (cont'd)

#### 3. Unidentified Leakage Calculation using Flow Totalizer

a) Check instrument used:

If the preferred DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1 is not functioning, use the alternate DW FLR DRN (PUMP) FLOW, LOW RANGE, 1E31-R551, Channel 1.

- b) (Record) The current value of DW FLR FLOW SUMP TOTAL from step 8.10.1.b or alternate DW FLR FLOW PMP DISCH TOTAL from step 8.10.1.c.
- c) (Record) The value of DW FLR SUMP FLOW taken
   ≈ 24 hours before (DW FLR
   FLOW PMP DISCH TOTAL, alternate)

Sunday's value: 045907 / 046915 / 047923

- d) (Record) The total number of gallons by subtracting c) from b).
- e) (Record) The number of minutes since reading in item c).
- f) (Record) Flow rate since last reading: Reading from d) divided by elapsed time e).

	X SUMP	X SUMP	□ SUMP □ PUMP				
M b) c) d) e) f)	$     \begin{array}{r}                                $	052099 048931 3168 1445 2.19					
D b) c) d) e) f)	049987 046915 3072 1440 2.13	053155 049987 3168 1440 2.2					
S           b)           c)           d)           e)           f)	051043 047923 3120 1440 2.17						

# **CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3**

CPS 9000.01D001

SUN

**REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE** g) (Record) Enter the

DW FLR DRN (SUMP) FLOW, LOW RANGE from recorder 1E31-R552, Channel 1.

(Record) Enter the h) DW FLR DRN (PUMP) FLOW, LOW RANGE

from recorder 1E31-R551, Channel 1.

- 3. Unidentified Leakage Calculation using Flow Totalizer (cont'd)
  - (Initial) Perform Channel Check of the calculated i) DW Floor Drain Sump flow rate (Step f above) and DW FLOOR DRAIN (SUMP) and (PUMP) FLOW rates (g and h above).

Comparison Guideline: 1.4 gpm

If MODE of operation of Sump Pumps (auto/manual) is changed, then at least 2 pump out cycles must occur before a reliable Channel Check can be performed.

2.1	2.3			
2.1	2.3			
2.2				
			······································	
2.2	2.4			
2.2	2.4			
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# **REVISION: 00**

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TROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3		n a da					CPS	9000.01D
REACTOR COOLANT SYSTEM - OPERATIONAL LEAK	AGE NOT	MON E	TODAY	WED	THU	FRI	SAT	SU
<ul> <li>CPS 4001.01, Reactor Coolant Leakage shall be entered if</li> <li>Any ITS LCO 3.4.5 RCS Operational LEAKAGE line</li> <li>Unidentified LEAKAGE increase of ≥ 0.5 gpm in a</li> <li>Unidentified LEAKAGE exceeds 2.5 gpm.</li> <li>1. (Record) Flow Readings From 1H13-P855</li> </ul>	f any of th mitation is 4 hour pe	e following le s exceeded. eriod (1.0 gpm	akage rates ar 1 in 8 hours).	e observed:		k	(E	:}
(at ≈ 8 hour intervals) a) Time readings taken		0000	0005				1	
	М	0800	0800					
	D	1600	1600		_			
	S [					4 W		
(ITS LCO 3.4.5 (a)) (It the Sump (hybbligg level) Flow Detector totalism in	м	048931	052009					4 
step 8.10.1.b is not functioning, use alternate Pump (magnetic motor) Flow Detector totalizer data in step	D	049987	053155	<u> </u>				
8.10.1.c for unidentified leakage calculations	s	051043	54301					
c) DW FLR FLOW PMP DISCH TOTAL (ITS LCO 3.4.5 (a))	м	NA	NA					
	D	NA	TNA 2	$\mathbf{h}$				
	s	NA C	NA 9	2				
d) DW EQUIP FLOW (ITS LCO 3.4.5 (a))	м	NA	NA					
If DW Equip Flow Totalizer is not functionin a Manual Determination of DW RF. In-Leako	g, ge D	NA	NO					
Flow Rate shall be performed using methodo described in CPS 3315 02 Leak Detection (I	logy	NA (	NA					
and recorded in step 8.10.4.g.1.		-		······				

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				MON	TODAY	WED	THU	FRI	SAT	SUN		
0	RE	EACTOR COOLANT SYSTEM - OPERATIONAL LEA	AKAGE	(cont'd)								
2. <u>]</u>	<u>DV</u> int	DW Floor Drain Sump Flow Rate Verifications (at $\approx$ 8 hour intervals)										
	a)	Check instrument used:				Τ			T			
		If the preferred DW FLR DRN (SUMP) FLOW,		X SUMP	X SUMP	🗆 SUMP	□ SUMP	🗆 SUMP	🗆 SUMP	🗆 SUMP		
		OW RANGE 1E31-R552, Channel 1 s not functioning, use the alternate OW FLR DRN (PUMP) FLOW, OW RANGE, 1E31-R551, Channel 1.		d PUMP	d PUMP	D PUMP	D PUMP	d PUMP	d PUMP	] PUMP		
	<b>L</b> \				<u> </u>	I						
	0)	The function of the function o	М	2.1			CONSTRUCTION OF THE PARTY OF TH	n Allen and A				
			D	2.1								
			S	2.2								
	c)	(Record) Enter the		<b></b>	1		1					
		DW FLR DRN (SUMP) FLOW, LOW RANGE	М	2.2	2.3							
		<u>or</u> alternate	D	2.2	2.30							
		DW FLR DRN (PUMP) FLOW, LOW RANGE 1E31-R551, Channel 1. (Initial) (MODE 1)	S	2.2 6	23	)						
	d)		0					1				
		Verify current DW Floor Drain/	М	DS	DS							
		reading of the previous 24 hours.	D	BR	BR							
		(ITS SR 3.4.5.1)	S	JG (	INITIAN	7						
	e)	(Initial) Verify ≤ 5 gpm on DW FLR DRN (SUMP) FLOW, LOW RANG 1E31-R552 Channel 1	EM	DS C	DS							
		<u>Or</u> alternate	D	BR	BR	2						
		DW FLR DRN (PUMP) FLOW, LOW RANGE 1E31-R551, Channel 1. (ITS SR 3.4.5.1)		JG	NITIAO							

Rev. <u>46</u>

NIKO.	LKU	OUM SURVEILLANCE LOG - MODE 1, 2, 3							CPS_9	<u>000.01D00</u>
				MON	TODAY	WED	THU	FRI	SAT	SUN
)	REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE (cont'd)									
	3.	Unidentified Leakage Calculation using Flow Totalizer		<b>.</b>				·		<u> </u>
	a)	Check instrument used:			1					1
		If the preferred DW FLR DRN (SUMP) FLOW,		X SUMP	X SUMP	🗆 SUMP		🗆 SUMP		
		LOW RANGE 1E31-R552, Channel 1 is not functioning, use the alternate DW FLR DRN (PUMP) FLOW, LOW RANGE, 1E31-R551, Channel 1.		D PUMP		D PUMP			D PUMP	D PUMI
	b)	(Record) The current value of DW FLR FLOW SUMP TOTAL from step 8.10.1.b or alternate DW FLR FLOW PMP DISCH TOTAL from step 8.10.1.c.	<u>M</u> b) c) d)	048931 045907 3024	052099 048931 3168					
	<b>c)</b>	(Record) The value of DW FLR SUMP FLOW taken ≈ 24 hours before (DW FLR FLOW PMP DISCH TOTAL, alternate)	e) f) D	<u>1440</u> <u>2.10</u>	<u>1445</u> <u>2.19</u>					
		Sunday's value: 045907 / 046915 / 047923	b) c)	<u>049987</u> <u>046915</u>	<u>053155</u> 049987				1. s	
	d)	(Record) The total number of gallons by subtracting c) from b).	d) e) f)	<u>3072</u> <u>1440</u> <u>2.13</u>	$\begin{array}{r} 3168\\ \underline{1440}\\ \hline 2.2 \end{array}$					
	e)	(Record) The number of minutes since reading in item c).	<u>S</u> b)	051043 047923	<u>.</u> <u>054307</u> 057043	$\sum$				
	f)	(Record) Flow rate since last reading: Reading from d) divided by elapsed time e).	d) e) f)	<u>3120</u> <u>1440</u> <u>2.17</u>	<u>3264</u> <u>1440</u> <u>2.27</u>					

# **CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3**

#### **REVISION: 00**

CPS 9000.01D001

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REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE (C

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- g) (Record) Enter the
   DW FLR DRN (SUMP) FLOW, LOW RANGE
   from recorder 1E31-R552, Channel 1.
- h) (Record) Enter the

DW FLR DRN (PUMP) FLOW, LOW RANGE

from recorder 1E31-R551, Channel 1.

3. Unidentified Leakage Calculation using Flow Totalizer (cont'd)

i) (Initial) Perform Channel Check of the calculated DW Floor Drain Sump flow rate (Step f above) and DW FLOOR DRAIN (SUMP) and (PUMP) FLOW rates (g and h above).

Comparison Guideline: 1.4 gpm

If MODE of operation of Sump Pumps (auto/manual) is changed, then at least 2 pump out cycles must occur before a reliable Channel Check can be performed.

AGE	(cont'd)						
М	2.1	2.3					
D	2.1	2.3					
S	2.2	230					
	Ke					L	لــــــــــــــــــــــــــــــــــــ
М	2.2 (	2.4					
D	2.2	2.4					
S	2.2	2.3 0					
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## CLINTON POWER STATION ADMIN JPM JPM NUMBER: RO A.3.2 REVISION: 00 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 through 11 below.

-

	1.	Task description and number, JPM description identified.	and number are
	2.	Knowledge and Abilities (K/A) references are in	ncluded.
. <u></u>	3.	Performance location specified. (in-plant, contr	ol room, or simulator)
	4.	Initial setup conditions are identified.	
	5.	Initiating and terminating cues are properly ider	ntified.
	6.	Task standards identified and verified by SME	review.
	7.	Critical steps meet the criteria for critical steps an asterisk (*).	and are identified with
 	8.	Verify the procedure referenced by this JPM ma current revision of that procedure: Procedure Rev Date	atches the most
	9.	Pilot test the JPM: a. Verify cues both verbal and visual are free o b. Ensure performance time is accurate.	of conflict, and
	10.	If the JPM cannot be performed as written with then revise the JPM.	proper responses,
	11.	When JPM is revalidated, SME or Instructor sig cover page.	n and date JPM
SME / Ir	nstruct	or – Signature / Printed	Date
SME / Ir	nstruct	or – Signature / Printed	Date
SME / Ir	nstruct	or – Signature / Printed	Date
 <ul> <li>Section 1 - Section 1 - Section 2 - Secti</li></ul>	an a		an an ann an the annual star algebra an angle a star an an angle angle angle angle angle angle angle angle ang

Page 2 of 9

# JPM NUMBER: \_\_\_\_\_ RO A.3.2

**REVISION:** <u>00</u>

Revision Record (Summary)

00	04/16/2002	This is a new RO Administrative JPM.
Revision	Date	Description

Page 3 of 9

JPM	NUMBER	R: <u>R(</u>	D A.3.2				·		RE	EVISIO	N: <u>00</u>
Opera	ator's Name:										
Job Ti	itle: 🗌	NLO		RO		SRO		STA		SRO Ce	rt.
JPM T JPM 1 Revis Task 1	Fitle: Number: ion Number Number and	: Title:	Entry r RO A.3 00	equirer 3.2	nents for	• a LHRA	/Contamin	nated A	<b>\rea</b>		
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## JPM NUMBER: \_\_\_\_\_ RO A.3.2

#### **REVISION: 00**

#### **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.

#### SIMULATOR SET-UP CONDITIONS:

## Not Applicable

#### TASK STANDARDS:

• Demonstrate the proper method for entering a Locked High Radiation Area (LHRA) and Contamination Area (CA) for the area.

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

#### RWP

Area survey maps (if not using current plant survey data)

#### **PROCEDURAL/REFERENCES:**

CPS 1900.21, Radiological Controlled Area Access and Exit RP-AA-376, Radiological Postings, Labeling, and Markings RP-AA-376-1001, Radiological Posting, Labeling, and Marking Standard

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### **INITIAL CONDITIONS AND INITIATING CUE:**

A report was received in the Main Control Room that there is a puddle of oil on the floor in the RWCU Pump "A" and this pump is running. Demonstrate the necessary actions to enter the pump room to locate the source of oil leakage.

**START TIME:** 

# - CLINTON POWER STATION

ADMIN JPM

## JPM NUMBER: RO A.3.2

104.51

**REVISION: 00** 

## **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**

*1	Review	current radiolo	gical survey data for their RWCU pumproom "A".
a mandari a mana a m	• Ide pos Cor	ntify the intende tings indicated i itamination Are	ed location on the map and determine the radiological Locked High Radiation Area (LHRA), and ea (CA) for the area.
Standard:	• Loc ————————————————————————————————————	ates and reviews	current radiological survey data for the RWCU pumproom
	• Entr	y requirements	on RWP10000422
Cue:	Hand th current	e examinee the I radiological surv	WCU pumproom "A" survey data after examinee locates ey data.
Comments:	If exami	inee goes to RP	for assistance the Map will be with the RWP
	If Exam as:	inee goes to the	RWCU pumproom "A" door tell the examinee it is posted
	• Loc	ked High Radiat	ion Area (LHRA), and Contamination Area (CA)
· · · · · · · · · · · · · · · · · · ·			
	SAT	UNSAT	Comment Number

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# CLINTON POWER STATION

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JPN	M NUMBER:I	RO A.3.2	<b>REVISION: 00</b>
RW	т ТР 10000422		· · · · · · · · · · · · · · · · · · ·
*2		Request a brief from RP	
	Standard	d: RP Brief requested.	
n fan fe an it ne skinder anarder y er	Cue	e: Act as RP and brief the following items:	
		1. Have a Minimum Remaining Allowable Dose of 100 m	nrem
		2. RP coverage and LHRA Key(RP tech covering will pro	ovide)
		3. Full set of PCs	
	Comments	s:	
		· · · ·	
en an tha search an	רובעים איז	- 	ייר העמיד אורי אורי אוראינאני אוריינאראי איז איז איז איז אורי איז אורי איז איז איז איז איז איז איז איז איז אי
		SAT UNSAT Comment Number	· · · · · · · · · · · · · · · · · · ·
1	<u></u>		1999 - 199 <u>9 - Andrea Andrea, and an </u>
*3		Logs onto RWP10000422 and determines remaining All	owable Dose of 100
		mrem	
	Standard	1: Examinee logs onto the RWP at the MGPAC computer	
		Determines has adequate dose margin of more than 100 mrs computer	em from MGPAC
	Cue	When examinee takes action to log onto the MPAC compute	er:
		• Tell examinee dose margin is 775 mrem	
		• Examinee is logged onto the RWP 10000422	
		Lizammee is logged onto the RW1 10000422	
	Comments	Student would have demonstrated how to access the MGPA	C computer during
	Comments	<ul> <li>Student would have demonstrated how to access the MGPA normal access to the RCA so logging onto RWP 10000422</li> </ul>	C computer during will NOT be required or
	Comments	<ul> <li>Student would have demonstrated how to access the MGPA normal access to the RCA so logging onto RWP 10000422 allowed</li> </ul>	C computer during will NOT be required or
	Comments	<ul> <li>Student would have demonstrated how to access the MGPA normal access to the RCA so logging onto RWP 10000422 allowed</li> </ul>	C computer during will NOT be required or
na sa	Comments	<ul> <li>Student would have demonstrated how to access the MGPA normal access to the RCA so logging onto RWP 10000422 allowed</li> </ul>	C computer during will NOT be required or
	Comments	<ul> <li>Student would have demonstrated how to access the MGPA normal access to the RCA so logging onto RWP 10000422 allowed</li> </ul>	C computer during will NOT be required or
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	Comments	<ul> <li>Student would have demonstrated how to access the MGPA normal access to the RCA so logging onto RWP 10000422 allowed</li> <li>SAT UNSAT Comment Number</li> </ul>	C computer during will NOT be required or

*4       Request RP coverage and LHRA Ke         Standard:       Requests an RP technician to support         Cue:       Act as RP ready to support entry and         Comments:       RP would be responsible for the LHR         SAT       UNSAT         Comments:       RP would be responsible for the LHR         SAT       UNSAT         Comments:       SAT         SAT       UNSAT         Comment       SAT         Vortex       Standard:         Examinee demonstrates by showing v       1.         Coveralls       2.         Hood       3.         Cotton glove liners       4.         Gloves       5.         Shoe covers       6.         Rubber Boots       Cue:         Once all steps for demonstrating acces       complete         Comments:       SAT       UNSAT         Comments:       SAT       UNSAT         Lease       SAT       UNSAT         Represented       Comments:       SAT         K/A REFERENCE NUM       AREFERENCE NUM	<b>REVISION: 0</b>
*4       Request RP coverage and LHRA Ke         Standard:       Requests an RP technician to support         Cue:       Act as RP ready to support entry and         Comments:       RP would be responsible for the LHR         Comments:       RP would be responsible for the LHR         SAT       UNSAT         SAT       UNSAT         Comments:       SAT         SAT       UNSAT         Comments:       Coveralls         2.       Hood         3.       Cotton glove liners         4.       Gloves         5.       Shoe covers         6.       Rubber Boots         Cue:       Once all steps for demonstrating accest complete         Comments:       SAT       UNSAT         SAT       UNSAT       Comments         SAT       UNSAT       Comments	<u>_</u>
Standard:       Requests an RP technician to support         Cue:       Act as RP ready to support entry and         Comments:       RP would be responsible for the LHR         SAT       UNSAT         Comments:       SAT         SAT       UNSAT         Comments:       SAT         SAT       UNSAT         Comments:       SAT         UNSAT       Comment         *5       Locates/Obtains full set of PCs         Standard:       Examinee demonstrates by showing v         1.       Coveralls         2.       Hood         3.       Cotton glove liners         4.       Gloves         5.       Shoe covers         6.       Rubber Boots         Cue:       Once all steps for demonstrating acces         complete       Comments:         SAT       UNSAT         Comments:       SAT         UNSAT       Comment         TERMINATING CUES:       SAT         Has demonstrated the access requirements for entry to a Loc         Contamination Area (CA) for the area.         STOP TIME:	(RP tech covering will provide)
Cue: Act as RP ready to support entry and Comments: RP would be responsible for the LHR SAT UNSAT Commen *5 Locates/Obtains full set of PCs Standard: Examinee demonstrates by showing v 1. Coveralls 2. Hood 3. Cotton glove liners 4. Gloves 5. Shoe covers 6. Rubber Boots Cue: Once all steps for demonstrating acces complete Comments: SAT UNSAT Comment TERMINATING CUES: Has demonstrated the access requirements for entry to a Loc Contamination Area (CA) for the area. STOP TIME:	nd has the LHRA key
Comments:       RP would be responsible for the LHR         SAT       UNSAT       Commen         *5       Locates/Obtains full set of PCs         Standard:       Examinee demonstrates by showing v         1.       Coveralls         2.       Hood         3.       Cotton glove liners         4.       Gloves         5.       Shoe covers         6.       Rubber Boots         Cue:       Once all steps for demonstrating acces         complete       Comments:         SAT       UNSAT         Comments:       SAT         VINSAT       Comment         FERMINATING CUES:	as the LHRA key
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SAT       UNSAT       Commen         *5       Locates/Obtains full set of PCs         Standard:       Examinee demonstrates by showing v         1.       Coveralls         2.       Hood         3.       Cotton glove liners         4.       Gloves         5.       Shoe covers         6.       Rubber Boots         Cue:       Once all steps for demonstrating acceler         comments:       SAT         UNSAT       Comment         FERMINATING CUES:	
SAT       UNSAT       Commen         *5       Locates/Obtains full set of PCs         Standard:       Examinee demonstrates by showing v         1.       Coveralls         2.       Hood         3.       Cotton glove liners         4.       Gloves         5.       Shoe covers         6.       Rubber Boots         Cue:       Once all steps for demonstrating accest complete         Comments:       SAT         UNSAT       Comment         TERMINATING CUES:	
*5 Locates/Obtains full set of PCs Standard: Examinee demonstrates by showing v 1. Coveralls 2. Hood 3. Cotton glove liners 4. Gloves 5. Shoe covers 6. Rubber Boots Cue: Once all steps for demonstrating acces complete Comments: SAT UNSAT Comment FERMINATING CUES: Has demonstrated the access requirements for entry to a Loc Contamination Area (CA) for the area. STOP TIME: K/A REFERENCE NUM	Number
Standard:       Examinee demonstrates by showing v         1.       Coveralls         2.       Hood         3.       Cotton glove liners         4.       Gloves         5.       Shoe covers         6.       Rubber Boots         Cue:       Once all steps for demonstrating access         complete       Comments:         SAT       UNSAT         Comments:       SAT         UNSAT       Comment         TERMINATING CUES:       Has demonstrated the access requirements for entry to a Loc Contamination Area (CA) for the area.         STOP TIME:	
1. Coveralls         2. Hood         3. Cotton glove liners         4. Gloves         5. Shoe covers         6. Rubber Boots         Cue:         Once all steps for demonstrating accer         complete         Comments:         SAT         UNSAT         Comments:         TERMINATING CUES:         Has demonstrated the access requirements for entry to a Loc         Contamination Area (CA) for the area.         STOP TIME:	ere to acquire each of the listed items
2. Hood     3. Cotton glove liners     4. Gloves     5. Shoe covers     6. Rubber Boots     Cue: Once all steps for demonstrating acces     complete     Comments:     SAT UNSAT Comment FERMINATING CUES:     Has demonstrated the access requirements for entry to a Lo     Contamination Area (CA) for the area. STOP TIME:     K/A REFERENCE NUM	
3. Cotton glove liners     4. Gloves     5. Shoe covers     6. Rubber Boots     Cue: Once all steps for demonstrating acces     complete     Comments:     SAT UNSAT Comment FERMINATING CUES:     Has demonstrated the access requirements for entry to a Lo     Contamination Area (CA) for the area. STOP TIME:     K/A REFERENCE NUM	
4. Gloves     5. Shoe covers     6. Rubber Boots     Cue: Once all steps for demonstrating accel     complete     Comments:     SAT UNSAT Comment FERMINATING CUES:     Has demonstrated the access requirements for entry to a Lo     Contamination Area (CA) for the area. STOP TIME:     K/A REFERENCE NUM	
5. Shoe covers     6. Rubber Boots     Cue: Once all steps for demonstrating acce.     complete     Comments:     SAT UNSAT Comment TERMINATING CUES:     Has demonstrated the access requirements for entry to a Lo     Contamination Area (CA) for the area. STOP TIME:     K/A REFERENCE NUM	
Cue: Once all steps for demonstrating acce complete      Comments:      SAT UNSAT Comment      TERMINATING CUES:      Has demonstrated the access requirements for entry to a Lo     Contamination Area (CA) for the area.  STOP TIME:	
Cue: Once all steps for demonstrating acce complete Comments: SAT UNSAT Comment TERMINATING CUES: Has demonstrated the access requirements for entry to a Lo Contamination Area (CA) for the area. STOP TIME: K/A REFERENCE NUM	
Comments:          SAT       UNSAT       Comment         FERMINATING CUES:       Image: Contamination Area (CA) for the area.       Image: Contamination Area (CA) for the area.         STOP TIME:       Image: Contamination Area (CA) for the area.       Image: Contamination Area (CA) for the area.	are completed tell the student the JPM is
SAT UNSAT Comment TERMINATING CUES: Has demonstrated the access requirements for entry to a Loc Contamination Area (CA) for the area. STOP TIME: K/A REFERENCE NUM	
SAT UNSAT Comment TERMINATING CUES: Has demonstrated the access requirements for entry to a Lo Contamination Area (CA) for the area. STOP TIME: K/A REFERENCE NUM	
SAT UNSAT Comment TERMINATING CUES: Has demonstrated the access requirements for entry to a Loc Contamination Area (CA) for the area. STOP TIME:  K/A REFERENCE NUM	
SAT UNSAT Commen TERMINATING CUES: Has demonstrated the access requirements for entry to a Lo Contamination Area (CA) for the area. STOP TIME: K/A REFERENCE NUM	
<ul> <li>TERMINATING CUES:</li> <li>Has demonstrated the access requirements for entry to a Lo Contamination Area (CA) for the area.</li> <li>STOP TIME:</li></ul>	Number
<ul> <li>Has demonstrated the access requirements for entry to a Lo Contamination Area (CA) for the area.</li> <li>STOP TIME:</li> <li>K/A REFERENCE NUM</li> </ul>	
K/A REFERENCE NUM	ked High Radiation Area (LHRA), and
	EIRS
	Importance Rating

2.3.1

Generic

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3.0

2.6

# CLINTON POWER STATION

JPM NUMBER: RO A.3.2

**REVISION: 00** 

## **INITIATING CUE**

A report was received in the Main Control Room that there is a puddle of oil on the floor in the RWCU Pump "A" and this pump is running. Demonstrate the necessary actions to enter the pump room to locate the source of oil leakage.

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#### JPM NUMBER: RO A.4.2

## **REVISION: 00**

## 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 through 11 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, or simulator)
  - 4. Initial setup conditions are identified.
  - 5. Initiating and terminating cues 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 referenced by this JPM matches the most current revision of that procedure:
    - Procedure Rev. Date
  - 9. Pilot test the JPM:

a. verify cues both verbal and visual are free of conflict, and b. ensure performance time is accurate.

- 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
- 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

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

## JPM NUMBER: RO A.4.2

# **REVISION: 00**

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

CLI	NT	ON	PO	WER	ST	`ATI	[ON

ADMIN JPM

## JPM NUMBER: RO A.4.2

# REVISION: 00

Operator's Name:
Job Title: IRO ISRO
JPM Title: Perform a Plant Assembly Announcement
JPM Number: RO A.4.2
Revision Number: <u>00</u>
Task Number and Title: 011285C501 Operate the Gaitronics System
K/A Number 2.4.43 Importance 2.8/3.5
Suggested Testing Environment: Simulator
Actual Testing Environment: 🗆 Simulator 🗅 Plant 🗔 Control Room
Testing Method:       Simulate       Alternate Path / Faulted:       Yes       No         Perform
Time Critical: I Yes INo
Estimated Time to Complete: 5_ minutes Actual Time Used: minutes
References:
EP-AA-113, PERSONNEL PROTECTIVE ACTIONS

EP-AA-113, Attachment 4, ASSEMBLY AND ACCOUNTABILITY

CLINTON POWER STATION	
ADMIN JPM JPM NUMBER: RO A.4.2	REVISION <u>: 00</u>
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?	Yes 🖵 💿 No
The operator's performance was evaluated against the standards co and has been determined to be:  Satisfactory  Uns	ntained in this JPM, satisfactory
Comments:	
Evaluator's Name:	
Evaluator's Signature:	Date:

#### JPM NUMBER: RO A.4.2

#### **REVISION: 00**

## **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.

## SIMULATOR SET-UP CONDITIONS:

None

#### **TASK STANDARDS:**

The Announcement for Site Assembly has been made.

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

**PROCEDURAL/REFERENCES:** 

EP-AA-113, PERSONNEL PROTECTIVE ACTIONS

EP-AA-113, Attachment 4, ASSEMBLY AND ACCOUNTABILITY

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

Once the examinee shows where the PA is and demonstrates how to us it, then take the examinee to an area away from the other examinees to state what he would announce.

#### **INITIAL CONDITIONS AND INITIATING CUE:**

- 1. A Site Emergency has just been declared.
- 2. You are the 'B' Reactor Operator.
- 3. The Control Room Supervisor has directed you to make the Plant Assembly announcement per EP-AA-113, PERSONNEL PROTECTIVE ACTIONS step 4.1.4.4.

**START TIME:** 

Page 6 of 8

JPM NUMBER: RO A.4.2

**REVISION: 00** 

## **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
EP-AA-113, PERS	SONNEL PROTECTIVE ACTIONS step 4.1.4.4
EP-AA-113, Attac	hment 4, ASSEMBLY AND ACCOUNTABILITY
*Step 1.1.3	Announce over the PA system
Standard	Examinee presses the ALL PAGE pushbutton and holds the pushbutton while performing the announcement
Comments	Once the examinee shows where the PA is and demonstrates who to us it, then take the examinee to an area away from the other examinees to state what he would announce.

SAT UNSAT Comment Number

Note Words in the announcement do not need to be exact.

*Step 2	"Attention, Attention, plant assembly has been ordered. All persons are to report to your assigned assembly area." (or equivalent words)
Standard	Makes an announcement similar to the one above.
Cue	It is not necessary to Repeat the message several times.
	SAT UNSAT Comment Number

#### **TERMINATING CUES:**

Demonstrate how to us the PA system and a Public Announcement.

**STOP TIME:** 

Page 7 of 8

## JPM NUMBER: RO A.4.2

3

## **REVISION: 00**

## **INITIATING CUE**

- 1. A Site Emergency has just been declared.
- 2. You are the 'B' Reactor Operator.

The Control Room Supervisor has directed you to make the Plant Assembly announcement per EP-AA-113, PERSONNEL PROTECTIVE ACTIONS step 4.1.4.4. ES-301

Administrative Topics Outline

Form ES-301-1

	Facility: Clinton Power Station			Date of Examination: 7/29/2002		
	Exam	nination Level (circle or	ne): RO / <b>SRO</b>	Operating Test Number: ILT0101-1		
	Administrative I Topic/Subject Description		Describe method of a 1. ONE Administrativ 2. TWO Administrativ	evaluation: e JPM, OR /e Questions		
	A.1	Conduct of Operations	JPM – Perform ERO Activation.			
		Notification Requirements	K/A 2.1.14 Imp 3.3			
4 <b>.R.</b> . F.3		Conduct of Operations	JPM - Review a Valv	e Lineup. (faulted)		
- <del></del> -		Plant Parameter Verification	K/A 2.1.29 Imp 3.3			
	A.2	Equipment Control	JPM - Review an An K/A 2.2.11 Imp 3.4	nunciator Log (faulted).		
		Tagging and Clearances				
	A.3	Radiation Control Ability to Perform	JPM - Redirect Work	ers in a High Radiation Area.		
		Procedures to Reduce Personnel Exposure	K/A 2.3.10 lmp 3.3			
	A.4	Emergency Plan Emergency Protective Action	JPM - Determine the downwind	PAR of evacuate 2 mile radius & 5 miles		
		Recommendations	K/A 2.4.44 Imp 4.0			

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NUREG-1021, Revision 8, Supplement 1

		Nuclear
	CLINTON POWER STAT	ION
	Job Performance Measu	re
	JPM Number: SRO A1a 1	
	Revision Number: 00	
	Date: 5/5/2002	
Developed By:	B Price Instructor	<u>5/5/02</u> Date
Validated By:	T. Pickley SME or Instructor	<u>5/9/02</u> Date
Review By:	P. O'Brien Operations Representative	<u>5/10/02</u> Date
Approved By:	B. Price Training Department	<u>5/21/02</u> Date

- NRC SUBMITTAL COPY

## JPM NUMBER: SRO A1a 1

## 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 through 11 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, or simulator)
- 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues 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 (\*).
  - Verify the procedure referenced by this JPM matches the most current revision of that procedure:
    - Procedure Rev. \_\_\_\_ Date \_\_\_\_\_
    - Pilot test the JPM:
       a. verify cues both verbal and visual are free of conflict, and
       b. ensure performance time is accurate.
    - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
    - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

. . . . . .

SME/Instructor

SME/Instructor

Date

Date

Date

JPM NUMBER: SRO A1a 1

**REVISION:** <u>00</u>

# **Revision Record (Summary)**

1. **Revision 00,** This is a new CPS JPM

## JPM NUMBER: SRO A1a 1

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**REVISION: 00** 

Operator's Name: Job Title:
JPM Title: Perform ERO activation JPM Number: SRO A1a 1 Revision Number: 00 Task Number and Title: Knowledge of system status criteria which requires the notification of plant personnel.
K/A Number 2.1.14 Importance 2.5 / 3.3
Suggested Testing Environment: Simulator to make the PA announcement only
Actual Testing Environment: 🗅 Simulator 🗅 Plant 🗅 Control Room
Testing Method:■       Simulate       Alternate Path / Faulted:       □       Yes       ■       No         □       Perform
Time Critical: 🖵 Yes 📕 No
Estimated Time to Complete: 15 minutes Actual Time Used: minutes
References:
EP-AA-112-100, CONTROL ROOM ACTIVATION AND OPERATION EP-AA-112, EMERGENCY RESPONSE ORGANIZATION (ERO) / EMERGENCY RESPONSE FACILITY (ERF) ACTIVATION AND OPERATION
<b>EVALUATION SUMMARY:</b> 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:
Evaluator's Signature: Date:

\_\_\_\_

## JPM NUMBER: SRO A1a 1

**REVISION: 00** 

#### 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.

#### SIMULATOR SET-UP CONDITIONS:

Not Applicable

#### TASK STANDARDS:

Activate the ERO for an Alert Classification

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

#### **PROCEDURAL/REFERENCES:**

EP-AA-112-100, CONTROL ROOM ACTIVATION AND OPERATION EP-AA-112, EMERGENCY RESPONSE ORGANIZATION (ERO) / EMERGENCY RESPONSE FACILITY (ERF) ACTIVATION AND OPERATION

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

Cue the candidate in an isolated area of the simulator. Let the student show where to locate the PA, demonstrates how to use it, then take the student to an isolated location to complete the task in a quiet voice.

#### **INITIAL CONDITIONS AND INITIATING CUE:**

You are the Shift Manager and have declared an Alert for a Fire. Make the announcement and activate the ERO if appropriate, per steps 1.2 and 1.3 in the attached copy of EP-AA-112-100, CONTROL ROOM ACTIVATION AND OPERATION.

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

## JPM NUMBER: SRO A1a 1

## **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**

EP-AA-112-100, CONTROL ROOM ACTIVATION AND OPERATION, Att. 1 SED Checklist

*1.2	ANNOUNCE the following to the Control Room staff and over the plant PA system: TIME		
	-Classification level; -Reason for classification; and -Activation of the TSC and OSC if appropriate.		
Standard	Makes the announcement of the following to the Control Room staff and over the plant PA system: Alert classification Level For a fire in the Plant Required to activate the TSC and OSC		
CUE	<ul> <li>As Shift Manager determines from the IMMEDIATE &amp; SUBSEQUENT ACTIONS TABLE that ERO is required to be activated for an ALERT.</li> <li>Announces and briefs the Control Room staff of: <ul> <li>Alert classification Level</li> <li>For a fire in the Plant</li> <li>Required to activate the TSC and OSC</li> </ul> </li> <li>Makes an announcement over the plant PA system: <ul> <li>Alert classification Level</li> <li>For a fire in the Plant</li> </ul> </li> <li>Required to activate the TSC and OSC</li> <li>Makes an announcement over the plant PA system: <ul> <li>Alert classification Level</li> <li>For a fire in the Plant</li> </ul> </li> <li>Required to activate the TSC and OSC</li> </ul>		
Comments	Writing the time is not critical Let the student show where to locate the PA, demonstrates how to us it. The PA announcement can be demonstrated by simply stating what would be announce over the PA system		

SAT UNSAT Comment Number

# JPM NUMBER: SRO A1a 1

1.3	NOTIFY or ACTIVATE the ERO per Attachment 2, ERO Augmentation. TIME
Standard	Utilizes Attachment 2 to ACTIVATE the ERO
CUE	If a request for the ERO communicator(EROC), state the EROC is busy making offsite notifications.
Comments	The time is to document step completion
	SAT UNSAT Comment Number
*1.1.1.1	INITIATE ERO Notification or Activation by dialing 1-877-486-6612 to remotely access DCC COMMUNICATOR computer.
Standard	<b>DIAL 9 to get an outside line then 1-877-486-6612</b> to remotely access DCC COMMUNICATOR computer
CUE	If 9 is dialed first then upon dialing the number 187 a busy tone will active.
	State the number is dialed and computer answers:
	"This is the remote activation module. Please enter your scenario activation password followed by the # sign."
Comments	<ol> <li>Telling the examinee that he gets a busy tone if he fails to dial a 9 first will allow the student an opportunity to understand his actions. If the student gets onto one of the few phones that don't require dialing a 9 for an outside numbe then have him demonstrate that the phone has direct outside access.</li> <li>Have dialing the number demonstrated on any available phone</li> </ol>
	SAT UNSAT Comment Number

# JPM NUMBER: SRO A1a 1

**REVISION:** <u>00</u>

*1.1.1.2	Enters scenario number followed by # button
Standard	Phone buttons 301# depressed
CUE	State 301# is dialed and computer answer: "To start a scenario, enter the scenario ID followed by the # sign or press # alone for more options."
Comments	Scenario 301# is the number for Clinton facility from the table in Att 2.
	1. Have dialing the number demonstrated on any available phone
	2. If # is pressed then restate the CUE.
	SAT UNSAT Comment Number
*1.1.1.3	ENTER the number previously entered in Step 2, followed by the # button.
Standard	Phone buttons 301# depressed
CUE	State 301# is dialed and computer answer:
	"If you want to Start a Scenario Activation Press 3."
Comments	Have dialing the number demonstrated on any available phone
	SAT UNSAT Comment Number
*1.1.1.4	Starts a scenario activation.
Standard	PRESS 3 activates scenario
CUE	<ul><li>State 3 is dialed and computer answer:</li><li>1. "The scenario is building."</li><li>2. A minute has passed, computer states: PRESS #, to exit.</li></ul>
Comments	Have dialing the number demonstrated on any available phone Pause for several moments before providing the second CUE SAT UNSAT Comment Number

# JPM NUMBER: SRO A1a 1

*1.1.1.5	Exits automatic callout system
Standard	PRESS #
CUE	State # is dialed and computer answer: "The scenario exited."
Comments	Have dialing the number demonstrated on any available phone
	State several minutes have passed before CUEING the next action
	SAT UNSAT Comment Number
1.1.1.6	MCR receives a call from the DCC COMMUNICATOR System confirming scenario activation.
Standard	call is received in Control Room from the DCC COMMUNICATOR System confirming scenario activation.
CUE	State several minutes have passed, the MCR phone is ringing and upon answering the computer states:
	This is the DCC COMMUNICATOR System confirming scenario activation.
Comments	
	SAT UNSAT Comment Number
STOP TIME:	

## **TERMINATING CUES:**

The Examinee determines the need to activate the ERO, performs a MCR announcement and activates the DCC COMMUNICATOR computer to activate ERO at Clinton

## K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER	K/A NUMBER	RO	SRO
Generic	2.1.14	2.5	3.3

JPM NUMBER: SRO A1a 1

## **INITIATING CUE**

You are the Shift Manager and have declared an Alert for a Fire. Make the announcement and activate the ERO if appropriate, per steps 1.2 and 1.3 in the attached copy of EP-AA-112-100, CONTROL ROOM ACTIVATION AND OPERATION.



· · · · · · · · · · · · · · · · · · ·	CLINTON POWER STATION						
•	Job Performance Measure						
•							
	JPM Number: SRO A.1.b.1						
	Revision Number: 00						
	Date: 04/17/2002						
Developed By:	Instructor	<u>4/17/02</u> Date					
Validated By:	B. Price	5/5/02					
	SME or Instructor	Date					
Review By:	P. O'Brien	5/6/02					
	Operations Representative	Date					
Approved By:	B. Price	5/21/02					
	Training Department	Date					

NRC SUBMITTAL COPY

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SRO A.1.b.1

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# JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE:	<b>DTE:</b> All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 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, consimulator)	trol room, or		
	4.	Initial setup conditions are identified.			
	5.	Initiating and terminating cues are properly ide	entified.		
	6.	Task standards identified and verified by SME	E review.		
	7.	Critical steps meet the criteria for critical steps with an asterisk (*).	s and are identified		
	8.	Verify the procedure referenced by this JPM r current revision of that procedure: Procedure Rev Date	natches the most		
	9.	Pilot test the JPM: a. verify cues both verbal and visual are free of b. ensure performance time is accurate.	of conflict, and		
	10	. If the JPM cannot be performed as written wit responses, then revise the JPM.	h proper		
	11	.When JPM is revalidated, SME or Instructor s cover page.	ign and date JPM		
	SM	E/Instructor	Date		
	SM	E/Instructor	Date		
	SME/Instructor Date				

CLINTON POWER STATION SYSTEM JPM SRO A.1.b.1

JPM NUMBER:

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**REVISION: 00** 

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

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JPM NUMBE	R: SRO A.1.b.1 REVISION: 00
Operator's Nam Job Title:	I SRO
JPM Title: JPM Number: Revision Numb Task Number a	Review A Valve Lineup (Faulted) SRO A.1.b.1 er: <u>00</u> nd Title:
K/A Number	.2.1.29 Importance 3.3
Suggested Test	ing Environment: Any
Actual Testing	Environment: 🛛 Simulator 🗅 Plant 🖵 Control Room
Testing Metho	d:□ Simulate Alternate Path / Faulted: ■ Yes □ No ■ Perform
Time Critical:	□ Yes ■ No
Estimated Tim	e to Complete: 10 minutes Actual Time Used: minutes
References:	CPS 1052.01, CONDUCT OF SYSTEM LINEUPS, Revision 7b CPS 3314.01V001, STANDBY LIQUID CONTROL VALVE LINEUP, Revision 10

CLINTON POWER STATIC	DN			
SYSTEM JPM JPM NUMBER: SRO A.1.b.1		REV	SION:	00
EVALUATION SUMMARY:				
Were all the Critical Elements performed satisfactorily?		Yes		No
The operator's performance was evaluated against the star and has been determined to be: $\Box$ Satisfactory	ndards ( U	containe Insatisfa	d in this ctory	JPM,
Comments:				
	<u></u>		· · · ·	
·				
Evaluator's Name:				
Evaluator's Signature:		Dat	e:	, <u>,,</u>

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#### JPM NUMBER: SRO A.1.b.1

#### **REVISION: 00**

## 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.

## SIMULATOR SET-UP CONDITIONS:

N/A

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#### TASK STANDARDS:

CPS 3314.01V001, STANDBY LIQUID CONTROL VALVE LINEUP, has been reviewed and the following discrepancies identified:

Failure of the Performer to sign and initial the first page.

Failure to terminate valve lineup and report 1C41-F031 found in wrong position Checker initials missing for 1C41-F323 (page 3)

Checker mitials missing for 1041-F323 (page 3)

Initialed space for 1C41-F031 in wrong position (page 5)

Determine acceptance criteria are not met.

## TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

## **PROCEDURAL/REFERENCES:**

CPS 1052.01, CONDUCT OF SYSTEM LINEUPS, Revision 7b CPS 3314.01V001, STANDBY LIQUID CONTROL VALVE LINEUP, Revision 10

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### INITIAL CONDITIONS AND INITIATING CUE:

Conditions for a plant startup are being set. An NLO has just returned from completing a lineup. You are assigned to review the SLC Valve Lineup (CPS 3314.01V001) for acceptance.

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

JPM NUMBER: SRO A.1.b.1

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## **REVISION: 00**

#### **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**

1.	Examinee assigned to review a completed SLC Valve Lineup.
Standard	Examinee begins review of SLC Valve Lineup.
CUE	Give examinee the marked-up copy of CPS 3314.01V001 (attached)
Comments	
	SAT UNSAT Comment Number
*2.	<ul> <li>Identify discrepancies in performance of CPS 3314.01V001:</li> <li>1. Failure of the Performer to sign and initial the first page.</li> <li>2. Checker initials missing for 1C41-F323 (page 3)</li> <li>3. Note 1 instead of an initial for 1C41-F031 in wrong position(page 5)</li> </ul>
Standard	<ul> <li>Examinee identifies discrepancies in performance of CPS 3314.01V001:</li> <li>1. Failure of the Performer to sign and initial the lineup checklist.</li> <li>2. Checker initials missing for 1C41-F323</li> <li>3. Note in space for 1C41-F031 in wrong position.</li> </ul>
CUE	<ul> <li>When the student point out problems ask what they would do about them to be able to : <ol> <li>Respond as D. Suzuki by signing and initialing</li> <li>Respond by saying time has gone by and state valve position is verified and initial in the open space with a MS</li> <li>If asked why 1C41-F031 is open, state that the valve had been worked on during the outage and was left open, the work is done. Respond by saying time has gone by and line out, initial and date the note 1 and state valve 1C41-F031 is shut and initial for DS/MS</li> </ol> </li> </ul>
Comments	<ol> <li>Indentifies the following problems:</li> <li>Directs Don Suzuki to sign and initial</li> <li>Direct step to be performed</li> <li>Directs valve to be shut and verified</li> </ol>
	SAT UNSAT Comment Number

JPM NUMBER: S	SYSTEM JPM           RO A.1.b.1         REVISION: 00
*3.	All components on a lineup shall be positioned and checked, marked "NA", or annotated appropriately per step 8.3.1.3 of CPS 1052.01, CONDUCT OF SYSTEM LINEUPS.
Standard	Examinee determines that the Acceptance Criteria are met per CPS 1052.01 and signs review of completed lineup Provide CPS 1052.01 when requested
Comments	CPS 1052.01 is a routine use procedure, and is not required to be referenced
	SAT UNSAT Comment Number

CLINTON POWER STATION

#### **TERMINATING CUES:**

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The discrepancies in the SLC Valve Lineup have been identified for failure to meet Acceptance Criteria as per CPS 1052.01. The problems are redirected to be completed, reviewed and signed for completion

STOP TIME:

## **K/A REFERENCE NUMBERS**

Importance Rating

3.3

K/A SYSTEM NUMBER GENERIC

**RO** 3.4 K/A NUMBER SRO 2.1.29

JPM NUMBER: SRO A.1.b.1

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**REVISION: 00** 

#### **INITIATING CUE**

Conditions for a plant startup are being set. An NLO has just returned from completing a lineup. You are assigned to review the SLC Valve Lineup (CPS 3314.01V001) for acceptance.


CLINTON POWER STATION					
	Job Performance Measure	e			
	JPM Number: SRO A.2.1				
	Revision Number: 00				
Date: 4/12/2002					
Developed By:	<u>D Antonelli</u> Instructor	<u>4/12/02</u> Date			
Validated By:	B. Price SME or Instructor	<u>5/5/02</u> Date			
Review By:	P. O'Brien Operations Representative	<u>5/7/02</u> Date			
Approved By:	B. Price Training Department	<u>5/21/02</u> Date			

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#### JPM NUMBER: SRO A.2.1

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## 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 through 11 below.

- 1. Task description and number, JPM description and number are identified.
- 2. Knowledge and Abilities (K/A) references are included.
- Performance location specified. (in-plant, control room, or simulator)
- 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues 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 (\*).
  - Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. \_\_\_\_ Date \_\_\_\_\_
- 9. Pilot test the JPM:
   a. verify cues both verbal and visual are free of conflict, and
   b. ensure performance time is accurate.
  - \_ 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
    - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

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

### JPM NUMBER: SRO A.2.1

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# **REVISION:** <u>00</u>

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

#### JPM NUMBER: SRO A.2.1

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**REVISION:** <u>00</u>

Operator's Name: Job Title:
JPM Title: Review Annunciator Log 1406.01 F001 JPM Number: SRO A.2.a 1 Revision Number: <u>00</u> Task Number and Title: Knowledge of the process for controlling temporary changes.
K/A Number 2.2.11 Importance 2.5 / 3.4
Suggested Testing Environment: Simulator
Actual Testing Environment: 🗅 Simulator 🗅 Plant 🗅 Control Room
Testing Method:□ Simulate Alternate Path / Faulted: ■ Yes □ No ■ Perform
Time Critical: 🖵 Yes 📕 No
Estimated Time to Complete: 15 minutes Actual Time Used: minutes
<b>References:</b> CPS No. 1406.01 ANNUNCIATOR TRACKING PROGRAM CPS No. 1406.01 F001 ANNUNCIATOR LOG CPS No. 1406.01 F002 ANNUCIATOR REVIEW REQUEST
EVALUATION SUMMARY: Were all the Critical Elements performed satisfactorily?
The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:
Comments:
Evaluator's Name:
Evaluator's Signature: Date:

#### JPM NUMBER: SRO A.2.1

#### 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.

#### SIMULATOR SET-UP CONDITIONS:

- Insert override to lock-in alarm 5043-1A High Temp Cntmt Bldg CCP Supply Air
- Install OOS Blue Post-It<sup>TM</sup> style (or equivalent) Tape Flags on the following annunciator windows: 5042-3C Low Flow MU Fan A VD System (VERIFY ALARM IS OFF)

5042-3C Low Flow MC Fail A VD System(VERIFT ALARM IS OFF)5042-8B Trouble WO System(VERIFY ALARM IS OFF)5043-1A High Temp Cntmt Bldg CCP Supply Air (VERIFY ALARM IS ON)

#### TASK STANDARDS:

Identifies that annunciator 5042-8B Trouble WO System is improperly labeled with a BLUE OOS tag rather than a Disabled Annunciator – Partial (DAP) ORANGE FLAG.

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

CPS No. 1406.01 ANNUNCIATOR LOG (attached) CPS No. 1406.01 F002 ANNUCIATOR REVIEW REQUEST (attached)

#### **PROCEDURAL/REFERENCES**:

CPS No. 1406.01 ANNUNCIATOR TRACKING PROGRAM CPS No. 1406.01 ANNUNCIATOR LOG CPS No. 1406.01 F002 ANNUCIATOR REVIEW REQUEST Three Blue Post-It<sup>TM</sup> style (or equivalent) Tape Flags.

#### **EVALUATOR INSTRUCTIONS:**

Provide examinee with attached CPS No. 1406.01 F001 and F002 as directed. Amplifying cues are provided within the JPM steps.

#### JPM NUMBER: SRO A.2.1

#### **INITIAL CONDITIONS AND INITIATING CUE:**

As an SRO you are requested to perform a review of the CPS No. 1406.01 ANNUNCIATOR LOG for Panel 1 H13-P801 in support of a condition report action. The request for the review is documented and approved on a CPS No. 1406.01 F002 ANNUCIATOR REVIEW REQUEST.

Provide the examinee with the following attached forms:

CPS No. 1406.01 ANNUNCIATOR LOG

CPS No. 1406.01 F002 ANNUCIATOR REVIEW REQUEST

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

#### JPM NUMBER: SRO A.2.1

2.2.1

#### **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.

OUT OF SERVICE ANNUNCIATOR (OOS) BLUE FLAG

#### **PERFORMANCE STEPS**

#### 2.2 ANNUNCIATOR TRACKING PROGRAM, 1406.01

	00101	~		
	An annuc	iator that	is not functi	oning properly due to:
	a) Alarn	ns without	t a valid con	dition,
	b) Fails	to alarm v	vith a valid o	condition present, or
	c) Alarn	n conditio	n due to an o	out of cal instrument.
Standard		5042-3C Examine present a place at t	Low Flow I be recognized and is proper this time.	MU Fan A VD System s that the alarm "Fails to alarm with a valid condition ly identified and labeled. There is no modifications in
CUE		Respond the area	as C Area t log and pass	hat you are aware of this requirement and it is noted in ed on at turnover.
		Respond	that AR003	434 is open awaiting Engineering action.
Comments		Student provided	may perform l. This is be	additional verification of the information, so cues are yond the standard.
		SAT	UNSAT	Comment Number

#### JPM NUMBER: SRO A.2.1

#### \*2.2.2 DISABLED ANNUNCIATOR – PARTIAL (DAP) ORANGE FLAG

An annunciator that has been partially disabled from the input circuit (DAP), or has had it's annunciator circuit modified from its original design. Individual annunciator input shall be disabled via a Temp Mod or other approved mechanism. Other inputs to the annunciator may still function to cause the alarm.

#### 5042-8B Trouble WO System

Standard	Examinee recognizes that the alarm is improperly classified as OOS. It should be DAP. One of several inputs is disabled using a Temp Mod.				
	• Log should be DAP instead of OOS				
	• Tag should be Orange for DAP, instead of OOS				
CUE	• Respond as C Area that you are aware of this requirement and it is noted in the area log and passed on at turnover.				
	• Respond that Temp Mod # 02-3333 is still in place, if asked.				
	• Respond that AR004445 is opened to repair the temperature switch, if asked.				
Comments	Student may perform additional verification of the information, so cues are provided. This is beyond the standard.				
	The condition does not meet the definition of 2.2.1 because it is modified to allow detection of other inputs to the alarm.				
	SAT UNSAT Comment Number				

## JPM NUMBER: SRO A.2.1

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2.2.1	OF SERVICE ANNUNCIATOR (OOS) BLUE FLAG				
	An annuciator that is not functioning properly due to:				
	d) Alarms without a valid condition,				
	e) Fails to alarm with a valid condition present, or				
	f) Alarm condition due to an out of cal instrument.				
	5043-1A High Temp Cntmt Bldg CCP Supply Air				
Standard	Examinee recognizes that the alarm is failed in an alarm condition and is properly identified and labeled. There is no modifications in place at this time.				
CUE	Respond as C Area that you are aware of this requirement and it is noted in the area log and passed on at turnover.				
	Respond that AR006767 is open awaiting I and C action to correct calibration problem.				
Comments	<ul> <li>Student may perform additional verification of the information, so cues are provided. This is beyond the standard.</li> <li>Examinee may direct that this alarm gets disabled, but is not a part of this JPM</li> </ul>				
	SAT UNSAT Comment Number				

### JPM NUMBER: SRO A.2.1

#### **TERMINATING CUES:**

Examinee reports/documents that verification of proper LABELING of Annunciator windows and TYPE (i.e. OOS/DAP/DAF) is completed. A discrepancy with an improper label type that is required to be corrected.

STOP TIME:

#### K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER Generic

K/A NUMBER	RO	<u>SRO</u>
2.2.11	2.5	3.4

#### **INITIATING CUE**

As an SRO you are requested to perform a review of the CPS No. 1406.01 ANNUNCIATOR LOG for Panel 1 H13-P801 in support of a condition report action. The request for the review is documented and approved on CPS No. 1406.01 F002 ANNUCIATOR REVIEW REQUEST.

These documents are provided.

#### JPM NUMBER: SRO A.2.1

**REVISION: 00** 

#### ANNUNCIATOR REVIEW REQUEST

Originator: John Doe Phone: X549 Date: June 20, 2002

Complete items 1 - 4 below, and route to the Operations Support Manager (or designee) or Shift Manager (SM).

An review of the following annunciator panels is requested:

- 1. Panels: **1H13-P801**
- 2. Reason for request: Corrective action for Condition Report 02-05-003
- 3. Type of review requested:
  - a. Reconcile the disabled and out of service annunciators in the Annunciator Log to the FLAGs on the windows and the cards pulled in the annunciator cabinet.
  - b. Give a description of the reason behind each locked in annunciator in the panels designated. This description should be returned to the Operations Support Manager (or designee).

#### X c. Other: Verify proper LABELING of Annunciator windows, TYPE (i.e. OOS/DAP/DAF), compensating actions are still in place and all required information is logged.

- 4. Request completion by:  $\frac{7}{30}/02$  Date
- 5. Review approval by the Operations Support Manager (or designee) or SM.

DD Initial

6. Review completed (use CPS No. 1406.01F003, ANNUNCIATOR REVIEW LOG) and discrepancies corrected on the Annunciator Log.

Reason for each alarming annunciator for Type 3.b review attached.

SM/CRS

# JPM NUMBER: SRO A.2.1

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**REVISION:** <u>00</u>

# **ANNUNCIATOR LOG**

# 1H13-P800 (Annunciator Panel)

5042-3C Low Flow MU Fan A VD SystemOOS5/10/02HSWindow Noun Name of WindowTypeDate/TimeSM/CRS				
Problem: Flow switch 1PDS- VD033 fails to actuate on decreasing air flow. When the fan is off the alarm does not actuate. NSED is developing a design change to correct the reoccurring problem.				
Compensatory Actions: C-Area Operator is to monitor Supply Filter dP locally at 1PL55J on 1PDI- VD050 twice daily.				
Responsibility: NSED AR003434 Restoration Approval (SM/CRS/Date): /				
5042-8B Trouble WO System Window Noun Name of WindowOOS Type5/12/02 Date/TimeAH				
Problem: <u>High Chiller Temp input causes alarm to spuriously actuate continuously masking other</u> inputs.				
Compensatory Actions: High Chiller Temp input is disabled using Temp Mod # 02-3333 allowing detection of other inputs. Area operator is to monitor Chiller Temperature at Panel OPL67JB.				
Responsibility: _AR004445 Restoration Approval (SM/CRS/Date):/				
5043-1A High Temp Cntmt Bldg CCP Supply AirOOS6/15/02JDWindow Noun Name of WindowTypeDate/TimeSM/CRS				
Problem: Temperature switch 1TS-VR166 is out of calibration high causing a continuous alarm.				
Compensatory Actions: <u>C Area to monitor temperature twice daily at CCP Local Panel 1PL17J using</u> temperature instrument 1TI-VR166.				
Responsibility: <u>IC Shop AR006767</u> Restoration Approval (SM/CRS/Date):/				

	Exelon.
	Nuclear
CLINTON POWER S	TATION
Job Performance M	easure
JPM Number: SRO /	A.3.1

Revision Number: 00

x

Date: 4/1/02

Developed By:	Mark Otten Instructor	<u>4/1/02</u> Date
Validated By:	B. Price SME or Instructor	<u>5/5/02</u> Date
Review By:	<u>P. O'Brien</u> Operations Representative	_5/6/02 Date
Approved By:	B. Price Training Department	<u>5/21/02</u> Date

- J

#### JPM NUMBER: SRO A.3.1

# 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 through 11 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, or simulator)
- 4. Initial setup conditions are identified.
  - 5. Initiating and terminating cues 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 (\*).
- Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. \_\_\_\_ Date \_\_\_\_\_
- 9. Pilot test the JPM:
   a. verify cues both verbal and visual are free of conflict, and
   b. ensure performance time is accurate.
  - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
    - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

 SME/Instructor
 Date

 SME/Instructor
 Date

 SME/Instructor
 Date

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JPM NUMBER: SRO A.3.1

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# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

# JPM NUMBER: SRO A.3.1

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Operator's Name:
Job Title:  SRO
JPM Title:Redirect Worker in a High Radiation Area JPM Number:SRO A.3.1 Revision Number: <u>00</u> Task Number and Title: Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure
K/A Number 2.3.10 Importance 3.3
Suggested Testing Environment: Any, simulator is prefered Actual Testing Environment:  Simulator  Plant  Control Room
Testing Method:□       Simulate       Alternate Path / Faulted:       □       Yes       ■       No         ■       Perform       Perform
Time Critical: 🛛 Yes 📕 No
Estimated Time to Complete: <u>10</u> minutes Actual Time Used: <u>minutes</u>
References:
RP-AA 460, CONTROLS FOR HIGH AND VERY HIGH RADIATION AREAS

RP-AA-400, ALARA PROGRAM

CLINTON POWER STATION	ON			
ADMIN JPM JPM NUMBER: SRO A.3.1			REV	ISION <u>: 00</u>
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?		Yes		No
The operator's performance was evaluated against the star and has been determined to be:	ndard D	s containe Unsatisfa	d in th ctory	is JPM,
Comments:				
			· · · · · · · · · · · · · · · · · · ·	
		·····		<u></u>
Evaluator's Name:				
Evaluator's Signature:		Dat	e:	

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#### JPM NUMBER: SRO A.3.1

#### **REVISION: 00**

#### 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.

#### SIMULATOR SET-UP CONDITIONS: None

#### TASK STANDARDS:

The NLO is waiting in a low dose area

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS: None PROCEDURAL/REFERENCES:

RP-AA 460, CONTROLS FOR HIGH AND VERY HIGH RADIATION AREAS RP-AA-400, ALARA PROGRAM

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### **INITIAL CONDITIONS AND INITIATING CUE:**

- 1. The Unit is at 50% power, you are the CRS.
- 2. An NLO is in the Aux Bldg Steam Tunnel to perform valve manipulations for feedwater flow trouble shooting.
- 3. The NLO was just directed by the Control Room to CLOSE 1FW042A "Rx Feedwater Flow Inst Root"
- 4. Shift turnover will be conducted in 15 minutes.
- 5. You are the CRS.

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

JPM NUMBER: SRO A.3.1

#### **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**

RP-AA 460, CONTROLS FOR HIGH AND VERY HIGH RADIATION AREAS

4.1.2.4.2. Only RP personnel are authorized to alter the position of radiological boundaries or barricades associated with an HRA/LHRA/VHRA.

#### \*Step 1 RP barricade blocks access to valve.

Standard Does not allow the NLO to move the barricade.

CUE As the NLO report that a RP barricade stanchion is blocking access to the valve and requests permission from the CRS to move the barricade.

Comments

SAT UNSAT Comment Number

Note	May direct the performance of step 3 before step 2.
Step 2	Directs RP to move barricade.
Standard	Contacts RP or directs NLO to contact RP to have barricade moved.
CUE	As RP report that the barricade will not be able to be moved until after shift turnover in 30 minutes
Comments	

SAT UNSAT Comment Number

## JPM NUMBER: SRO A.3.1

#### **REVISION: 00**

#### RP-AA-400, ALARA PROGRAM

3.10.1. ENSURE that department personnel comply with ALARA Program procedures and requirements.

# \*Step 3 Directs NLO to low dose area.

Standard

Has NLO go to low dose area and/or exit Locked High Radiation Area

CUE Respond to direction accordingly: stating in the low dose area and/or exit Locked High Radiation Area

Comments

#### SAT UNSAT Comment Number

#### **TERMINATING CUES:**

The NLO is waiting in a low dose area, this JPM is complete.

STOP TIME:

JPM NUMBER: SRO A.3.1

**REVISION: 00** 

#### **INITIATING CUE**

- 1. The Unit is at 50% power.
- 2. An NLO is in the Aux Bldg Steam Tunnel to perform valve manipulations for feedwater flow trouble shooting.
- 3. The NLO was just directed by the Control Room to CLOSE 1FW042A "Rx Feedwater Flow Inst Root"
- 4. Shift turnover will be conducted in 15 minutes.
- 5. You are the CRS.



	CLINTON POWER STATION	
	Job Performance Measure	
	JPM Number: SRO A.4.1	
	Revision Number: 00	
	Date:4/2/02	
Developed By:	Mark Otten	4/2/02
	Instructor	Date
Validated By:	B. Price	5/5/02
	SME or Instructor	Date
Review By:	P. O'Brien	5/6/02
	<b>Operations Representative</b>	Date
Approved By:	B. Price	5/21/02
	Training Department	Date

# JPM NUMBER: SRO A.4.1

# JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE:	All step Prior to	Il steps of this checklist should be performed upon initial validation. rior to JPM usage, revalidate JPM using steps 8 through 11 below.				
	1.	Task description and number, JPM description identified.	n and number are			
	2.	Knowledge and Abilities (K/A) references are	included.			
<u></u>	3.	Performance location specified. (in-plant, cont simulator)	rol room, or			
	4.	Initial setup conditions are identified.				
<u> </u>	5.	Initiating and terminating cues are properly ide	entified.			
	6.	Task standards identified and verified by SME	review.			
	7.	Critical steps meet the criteria for critical steps with an asterisk (*).	and are identified			
	8.	Verify the procedure referenced by this JPM n current revision of that procedure: Procedure Rev Date	natches the most			
	9.	Pilot test the JPM: a. verify cues both verbal and visual are free of b. ensure performance time is accurate.	of conflict, and			
	10	. If the JPM cannot be performed as written with responses, then revise the JPM.	h proper			
	11	When JPM is revalidated, SME or Instructor s cover page.	ign and date JPM			
	SM	E/Instructor	Date			
	SM	E/Instructor	Date			
	SME/Instructor Date					

. .

JPM NUMBER: SRO A.4.1

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REVISION: 00

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

#### JPM NUMBER: SRO A.4.1

**REVISION: 00** 

Operator's	Name:	
Job Title:	SRO	

JPM Title:Determine a PAR JPM Number:SRO A.4.1 Revision Number:00 Task Number and Title: Knowledge of emergency plan protective action recommendations

K/A Number 2.4.44 Importance 4.0

**Suggested Testing Environment:** Simulator or Control room where references are immediately available

Actual Testing Environment: 🖸 Simulator 📮 Plant 📮 Control Room

Testing Method:□SimulateAlternate Path / Faulted: □YesNo■Perform

Time Critical: Yes 🛛 No

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

#### **References:**

EP-AA-111, EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS

Clinton Annex

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JPM NUMBER: SRO A.4.1			REV	ISION <u>: 00</u>
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?		Yes		No
The operator's performance was evaluated against the star and has been determined to be: $\Box$ Satisfactory	ndards DU	containe Insatisfa	ed in th actory	is JPM,
Comments:				
Evaluator's Name:				
Evaluator's Signature:		Dat	e: _	

#### JPM NUMBER: SRO A.4.1

#### **REVISION: 00**

## 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.

#### SIMULATOR SET-UP CONDITIONS:

None

#### TASK STANDARDS:

Determine the action is to Evacuate 2 Mile Radius & 5 Miles Downwind.

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS: None PROCEDURAL/REFERENCES:

# EP-AA-111, EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS

Radiological Emergency Plan Annex for Clinton Station

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### INITIAL CONDITIONS AND INITIATING CUE:

- 1. A General Emergency has just been declared per EP-AA-111, EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS using the Radiological Emergency Plan Annex for Clinton Station
- 2. Reactor Water level is -177 inches.
- 3. Radiation levels in the containment are 6371 R/hr.
- 4. Hydrogen concentration in the containment is 6.1%
- 5. The wind direction is 159°
- 6. You are to determine the PARs.

#### START TIME: \_\_\_\_\_

JPM NUMBER: SRO A.4.1

## **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**

Step 1	Refer to Fission Product Barrier Matrix		
Standard	Examinee refers to Fission Product Barrier Matrix		
Comments			
	SAT UNSAT Comment Number		
Step 2	Determine that a Loss of RCS Barrier has occurred. Determine that a Loss of Fuel Clad Barrier has occurred. Determine that a Potential Loss of Containment Barrier has occurred.		
Standard	Examinee determines: Loss of RCS Barrier, Loss of Fuel Clad Barrier, and Potential Loss of Containment Barrier has occurred.		
Comments			
	SAT UNSAT Comment Number		

#### JPM NUMBER: SRO A.4.1

#### **REVISION: 00**

EP-AA-111, EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS

2.8.2.1. The PAR must be provided to the State, and designated local agencies as applicable, within 15 minutes of (1) the classification of the General Emergency

\*Step 3Determine the action is to Evacuate 2 Mile Radius & 5 Miles DownwindStandardExaminee determines the action is to evacuate a 2 mile radius and 5 miles

downwind.

Comments

SAT UNSAT Comment Number

#### **TERMINATING CUES:**

PAR is determined

STOP TIME:

Verify elapsed time meets the time critical requirement

JPM NUMBER: SRO A.4.1

**REVISION: 00** 

#### **INITIATING CUE**

- 1. A General Emergency has just been declared per EP-AA-111, EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS using the Radiological Emergency Plan Annex for Clinton Station
- 2. Reactor Water level is -177 inches.
- 3. Radiation levels in the containment are 6371 R/hr.

4. Hydrogen concentration in the containment is 6.1%

- 5. The wind direction is 159°
- 6. You are to determine the PARs.

ES-30	1 <b>1</b> ****	Administrative Topics Outline	Form ES-301
Facili Exan	ity: <u>Clinton Power S</u> nination Level (circle	tation Date of	of Examination: <u>7/29/2002</u> g Test Number: <b>ILT0101-2</b>
	Administrative Topic/Subject Description	Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions	
A.1	Conduct of Operations Fuel Handling	JPM – Review and determine if fuel mo K/A 2.1.7 Imp 4.4	oves can continue
	Conduct of Operations Plant Parameter Verification	JPM – Determine if Power, Flow or Con exceeded (faulted) K/A 2.1.19 Imp 3.0	re Thermal limits have been
A.2	Equipment Control Surveillance Testing	JPM – Review surveillance and recogn Reactor Coolant leakage off-Nor K/A 2.2.12 Imp 3.4	nize entry condition to mal(Faulted)
A.3	Radiation Control Exposure Limits	JPM Request Radiation Exposure Ex K/A 2.3.10 Imp 3.0	<b>ktension</b>
A.4	Emergency Plan Lines of Authority During an Emergency	JPM – Transfer Command and Control K/A 2.4.38 Imp 4.0	l to the TSC

NRC SUBMITTAL COPY

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NUREG-1021, Revision 8, Supplement 1

90.02 2000



(	CLINTON POWER STATI	ON
	Job Performance Measu	re
	JPM Number: SRO-A.1.a.2	2
	Revision Number: 00	
	Date: 04/16/2002	
	۰.	
Developed By:	C. Ware	4/16/02
	Instructor	Date
Validated By:	B. Price	5/5/02
	SME or Instructor	Date
Review By:	P. O'Brien	5/6/02
	<b>Operations Representative</b>	Date
Approved By:	B. Price	5/21/02
	Training Department	Date

RO A.1.a.2

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# JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

	<b>1</b> .	Task description and number, JPM description and number are identified.	ł
	2.	Knowledge and Abilities (K/A) references are included.	
	3.	Performance location specified. (in-plant, control room, or simu	lator)
<u></u>	_ 4.	Initial setup conditions are identified.	
	5.	Initiating and terminating cues are properly identified.	
	6.	Task standards identified and verified by SME review.	
	- 7.	Critical steps meet the criteria for critical steps and are identifie an asterisk (*).	d with
	<b>8</b> .	Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev Date	
	9.	Pilot test the JPM: a. Verify cues both verbal and visual are free of conflict, and b. Ensure performance time is accurate.	
•	<b>10</b> .	If the JPM cannot be performed as written with proper respons then revise the JPM.	es,
		When JPM is revalidated, SME or Instructor sign and date JPM cover page.	1
SME /	Instruct	or – Signature / Printed Date	<u></u>
SME /	Instruct	or – Signature / Printed Date	

# JPM NUMBER: SRO-A.1.a.2

# **REVISION:** <u>00</u>

# **Revision Record (Summary)**

Revision	Date	Description
00	04/16/2002	This is a new SRO Administrative JPM.

Page 3 of 9

JPM NUMBER:	SRO-A.1.a.2_

**REVISION:** <u>00</u>

	Operator's Name:
	Job Title: INLO IRO ISRO ISTA ISRO Cert.
	JPM Title: Determine if Fuel Movement Can Continue (One SRM
	JPM Number: ILT0101-SRO-A.1.a.2
	Revision Number:       00         Task Number and Title:       031345C209 / Monitor Refueling Floor Activities from the Main         Control Room during Core Alterations
	K/A Number Generic 2.1.7 Importance 4.4
	Suggested Testing Environment: Any Location Where References are Available
	Actual Testing Environment:
	Testing Method:□SimulateAlternate Path / Faulted:■Yes□No■Perform
	Time Critical: 🗆 Yes 🔳 No
a jaja – je v sere	Estimated Time to Complete: <u>10 minutes</u> Actual Time Used: minutes
	References: CPS 3703.01, Core Alterations
	CPS 9000.01D002, Control Room Surveillance Log - Mode 4, 5 Data Sheet CPS 9000.03, Core Alteration Surveillance Log CPS Technical Specifications
	EVALUATION SUMMARY:
	Were all the Critical Elements performed satisfactorily? $\Box$ Yes $\Box$ No
	The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:
	Comments:
	Evaluator's Name:
	Evaluator's Signature: Date:
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المىلىتىنىنىڭىلىپارىياسە يېپىرىغە مايىرى ئەسەرى مەھەمەمەرى ( بىر بەر بەر مەمەرىيەر ، بار مەمەر	
	Page 4 of 9
#### JPM NUMBER: SRO-A.1.a.2

#### **REVISION:** <u>00</u>

#### **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.

#### SIMULATOR SET-UP CONDITIONS:

(Not applicable if the JPM Testing Environment is the Classroom)

Or if the simulator can establish conditions:

Place simulator in a Refuel IC. Verify that the Mode Switch is locked in Refuel with key removed. Verify that all control rods are fully inserted. I/O so SDC apears Linedup return to the fuel pool. Withdraw SRM 'D' untill it reads less than 3 counts, override the retract not permitted alarm, stick the D SRM and I/O the SRM "in" light on when the retract power pushputton is depressed. Replicate communication setup between the Control Room and refuel platform.

#### TASK STANDARDS:

• Determines that an immediate suspension of core alterations is required.

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

CPS 9000.01D002, Control Room Surveillance Log - Mode 4, 5 Data Sheet (prefilled out with data supporting SRM 'D' downscale, only need Step 8.4.1 page) CPS 9000.03, Core Alteration Surveillance Log (prefilled out with data supporting SRM 'D' downscale)

#### **PROCEDURAL/REFERENCES:**

CPS 3703.01, Core Alterations CPS 9000.01D002, Control Room Surveillance Log - Mode 4, 5 Data Sheet CPS 9000.03, Core Alteration Surveillance Log CPS Technical Specifications

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### INITIAL CONDITIONS AND INITIATING CUE:

The reactor plant is in Mode 5. Core alterations are in progress in the North East Quadrant. Thirty-five bundles are installed in the quadrant. The Reactor Operator has just completed CPS 9000.03, Core Alteration Surveillance Log CPS 9000.01D002, Control Room Surveillance Log - Mode 4, 5 Data Sheet and handed them to you for review. Report when your review is complete.

#### START TIME:

Page 5 of 9

### JPM NUMBER: SRO-A.1.a.2

**REVISION: 00** 

#### **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**

9000.03, Core Alteration Surveillance Log and CPS 9000.01D002, Control Room Surveillance Log - Mode 4, 5 Data Sheet

1	8.3	Conducts	Conducts Shift Management review.									
	Standard:	Determine is located adjacent c	es that SRM 'D in the quadran quadrants have	' is downscale (less than 3 cps). Determines that SRM 'D' t where core alterations are occurring. Determines that operable SRMs.								
	Cue:	If asks for Sheet, har	If asks for CPS 9000.01D002, Control Room Surveillance Log - Mode 4, 5 Data Sheet, hand examinee the CPS 9000.01D002 Step 8.4.1 page.									
	Comments:	No other	pages from CP	S 9000.01D002 are needed for this JPM.								
		SAT	UNSAT	Comment Number								
	· · ·											

JPM NUMBER: SRO-A.1.a.2

\*2

**REVISION:** 00

#### NOTE

Failure to meet the Acceptance Criteria shall constitute a failure to comply with the applicable LCO. ITS should be immediately reviewed to identify Action Statements needed for implementation. Refer to Supplemental Review Sheet for applicable LCOs.

9.1 9.1.1 Items in section 8.0 of CPS 9000.03 are satisfactory.

- Standard: Determines that core alterations must be immediately suspended. Notifies Refuel SRO that core alterations must be immediately suspended.
  - Cue: Acknowledge notification that core alterations must be suspended.

Comments: Examinee may determine core alteration suspension from any of the following:

	And the second second					•	CPS '	<b>Fech</b>	nica	1 Spec	ificatio	ns by	enter	ing LC	CO 3.3	3.1.2,	SRM 1	nstrun	nentatio	n.
11.7	1997 - 1997 - 1995 - 1995 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	and the second second second	a	NAMES AND ADDRESS	» - بندرت «بهادانت» دنها هات ک	الالبثار بالتسعفانة	للترجيح هوج	4	Second Street	es an e		•		. <b>.</b>						
Seator and the	Survey Street		A CONTRACTOR OF STREET	A DOLLAR PROPERTY.			- section and section of the section	Charles in Suid In-	Contraction of the local division of the loc	And the Contraction of the Contr		mitters (marked)		and develop of the second s	AND COMPANY OF THE OWNER	a the second states of the	Contractor and	and other the states	or concernence of	A consistences
		Contraction of the second			and the art of the total and	et and the second	and the state of the local division of the l		and the second second	the state of the state	17	74	Carlo Carlo Carlo Bros	and the second of	Construction of the second	And and the state of the D			and the second	and the second second second second second
	Contract of the local of the	21. 20 200	Contraction of the		STATE OF ALL AND ADDRESS		mar	707	01	<u> </u>	A 14 4	<b>1</b>		Second Second	·	10				
AND IN THE OWNER					Contrast of the second second	•	PN	5705	01	Core	Alterati	ODS D	rom L	amuar	ion o.	10				
				and the second second			<u>, , , , , , , , , , , , , , , , , , , </u>	5705		Q010.				IIIII COLU.	ion oi					
	and the state of the second state					and a second a low states				and the second	a hard the second second			- International Contractor						A COLORIDATION AND A COLORIDATICATICATICATICATICATICATICATICATICATIC

SAT UNSAT Comment Number

JPM NUMBER: SRO-A.1.a.2

#### **TERMINATING CUES:**

Shift Management/Refuel SRO/Reactor Engineering notified that core alterations must be immediately suspended.

**STOP TIME:** 

K/A REFEREN	CE NUMBERS	Shihit Silahit eshiqit	
		Importanc	e Rating
K/A System Number	K/A Number	RO	SRO
Generic	2.1.7	3.7	4.4
	2.1.33	3.4	4.0

### JPM NUMBER: SRO-A.1.a.2

**REVISION: 00** 

## **INITIATING CUE**

The reactor plant is in Mode 5. Core alterations are in progress in the North East Quadrant. Thirty-five bundles are installed in the quadrant. The Reactor Operator has just completed CPS 9000.03, Core Alteration Surveillance Log CPS 9000.01D002, Control Room Surveillance Log - Mode 4, 5 Data Sheet and handed them to you for review. Report when your review is complete.

2-13

CONTROL ROOM SURVEILLANCE LOG - MODE 4, 5 DATA SHEET SCOPE OF REVISION: Periodic review and format update per CPS 1005.00/01/02 criteria. Major layout updates to match improvements in D001. Benchmarked BWROG SRM Channel Check Comparison Guideline added per 8.4.1: RF6 Restart OPs Self Assessment (CCF 00-0081: Westbrook). 8.4.7.b: Use of CM indication updated to match approved PDR 99-1254 on D001 . 8.12: Changed order of occurrence of AR/PR monitors to match AR/PR LAN printout for ease of use by operators. Matches D001 layout. 8.12: Removed Rad Monitor ORIX-PR040 CK, covered in 9911.50 (CCF 99-1974). 8.12.12: Allows use of the Meteorological Data Recorders as alternative instruments to satisfy ORM 4.2.8.1 channel check requirements (matches PDR 99-1151 to D001). Specific Rev. 35a [Landin]: Editorial - Page 9 Heading off-center, corrected. 0 8.12 area size increased per OPs request to match D001 layout. 2 Specific Rev. 35b [Landin] - EDITORIAL CR 79830-07 - 8.12.34-37: added check of supporting Ch 14 not deleted.

## **CONTINUOUS USE**

ORIGINATOR:

Thomas J. Landin

CLASS CODE: SNND1

ITR: B. Brehm

APPROVAL DATE: MAR 09 2000

CURRENT CHANGES	ТО	GENERAL	RE	VISION				•			
Change # • 35a		Date 05/07/01		List of Affe 1,9,10,11,12,12	cted Pag	res					
<b>2</b> 35b		01/10/02	• •	1, 12	<u></u>					 	
 3		•								•	
 4						·	•		. •	•	
6							÷.				
	•				•						

Page 1 of 15

CONTROL ROOM SURVEILLANCE LOG - MODE 4, 5

MON	TUE	WED	THU	FRI	SAT	SUN
	Today					

## INSTRUMENTATION

8.4

## 8.4.1 Source Range Monitors (SRM)

#### 0 SRM Comparison Guideline:

3 to 500 cps when all rods are inserted.

If a channel is > 500 cps, refer to CPS 1401.09 to evaluate channel operability.

Α

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A

В

С

D

А

В

С

D

SRM Channel

SRM Channel

Days

Days

Days

Days

Swings

Swings

Swings

Swings

38 cps

12 cps

44 cps

17 cps

cps

cps

cps

cps

IN/ H

20 cps

<u>21 cps</u>

19 cps 6 cps

29

Fi

38

24

21 cps

P cps

16 cps

2 cps

cps

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cps

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cps

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cps

/ 1

1. MODE 4 [DAYs only]

a) Record/Verify  $\geq 3.0$  cps. SRM Channel Use DCS Display. Verify SRMs full in.  $(\geq 2 \text{ channels})$ (ITS SR 3.3.1.2.4 T1)

b) (Initial) Channel Check SRM indications. • 1H13-P678 DCS (flux & period) (ITS SR 3.3.1.2.3 T1)

#### 2. MODE 5 [Shiftly]

Record/Verify  $\geq$  3.0 cps. SRM Channel a) Mids Use DCS Display. Mids Verify SRMs full in. Mids  $(\geq 2 \text{ channels})$ (ITS SR 3.3.1.2.4 T1) Mids

Record/Verify  $\geq$  3.0 cps. b) Use DCS Display. Verify SRMs full in.  $(\geq 2 \text{ channels})$ 

(ITS SR 3.3.1.2.4 T1)

Record/Verify  $\geq$  3.0 cps. c) Use DCS Display. Verify SRMs full in.  $(\geq 2 \text{ channels})$ (ITS SR 3.3.1.2.4 T1)

d) (Initial) Channel Check SRM indications. • 1H13-P678 • DCS (flux & period) (ITS SR 3.3.1.2.1 T1)

MA cps cps cps cps cps		_cps _cps _cps _cps											
x/MAx	x/	/X											
													1

cps

1 1

cps

CDS

cps

1 1

cps

1 1

cps

1 1

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Page 5 of 15

CONTROL ROOM SURVEILLANCE LOG - MODE 4, 5

		r						
		MON	TUE	WED	THU	ERT	SAT	SUN
8.4	INSTRUMENTATION (CONC'O)		Today					
8.4.6	Scram Discharge Volume (SDV) Level		, , , , ,					
	(MODE 5 with any control rod withdrawn from a core cell containing one or more fuel assemblie	s.)						
		<u> </u>	, Mr					
	(Initial) Channel Check SDV Level indications.	NAINAINA	NAV /	/ /	/ /	/ /	/ /	/ /
	RPS ATM 1C11-N601A, B, C, D	······ ,						
	(ITS SR 3.3.1.1.1 T8.a)							
8.4.7	Suppression Pool Level							
• 	1 (Initial) Channel Check Suppression Pool	L. ALY			1 1 12			
	Level indications.	W/W/	* / /	/ /		/ /	1 1	
	a) ATM 1E22-N655C, G (inst. zero = 731' 5"	)						
0	b) 1LR-CM240, -CM241 or 1LY-CM030, -CM031, 1LY-SM006 (1H13-P852), 1LY-SM013 (1H13-P4	862)						
	Instrument zero is 727'0".							
	1LR-CM240 & CM241 read in feet and inche 1LY-SM006, 1LY-SM013 read 0 - 100%,	S.						
	with full scale equal to +70".							
0	Use following when conducting channel Ch (Also applicable to 11Y-CM030 & CM031.)	eck.						
	0% = 15'0'' $67% = 18'11''$	100% = 20'	10″					
	25% = 16'5.5'' $71% = 19'2''50% = 17'11''$ $76% = 19'5''$							
								· · · · · ·
	2. (Record) Record/Verify <u>CM030</u>	ft-in	<u>/X/X</u> ft-in	$\frac{/X/X}{ft-in}$	$\int \frac{1}{\text{ft-in}}$	$\frac{1}{\text{ft-in}}$	$\frac{1}{\text{ft-in}}$	/X/X ft-in
	suppression Pool water Level is > 12'9" from recorder 1LR-CM030							
	and 1LR-CM031 on 1H13-P601. CM031	AN IX IX	Ju /x/x	/x/x	/x/x	/x/x	/x/x	/x/x
	(ITS SR 3.5.2.1, 3.5.2.2.a)	ft-in	$\frac{-}{\text{ft-in}}$	ft-in	ft-in	ft-in	ft-in	ft-in

If either recorder is inoperable or below range (16'), then refer to recorders 1LR-SM014 and 1LR-SM016 on 1H13-P601.

If recorder sets 1LR-CM030 and 1LR-CM031, or 1LR-SM014 and 1LR-SM016 are not operable, then locally verify Suppression Pool water level is above the top of the upper row of drywell vents ( $\geq 13'1''$ ).

CONTROL ROOM SURVEILLANCE LOG - MODE 4, 5

- 8.4 INSTRUMENTATION (cont'd)
- 8.4.13 HPCS Pump Discharge Pressure
  - (Initial) Channel Check HPCS Pump Discharge Pressure indications.
  - HPCS ATM 1E22-N651 (ITS SR 3.3.5.1.1 T3.f)
- 8.4.14 HPCS Pump Minimum Flow
  - (Initial) Channel Check HPCS Pump Minimum Flow indications.
  - HPCS ATM 1E22-N656 (ITS SR 3.3.5.1.1 T3.g)

#### 8.5 RESIDUAL HEAT REMOVAL

- (Initial) Verify proper operation of the RHR Shutdown Cooling MODE per applicable MODE:
- 1. (MODE 4)

Verify one RHR shutdown cooling subsystem or recirculation pump is operating. (ITS SR 3.4.10.1)

- 2. (MODE 5 with irradiated fuel in the RPV and water level ≥ 23 ft above the top of the RPV flange)
  - Verify one RHR shutdown cooling subsystem is operating. (ITS SR 3.9.8.1)
- 3. (MODE 5 with irradiated fuel in the RPV and water level < 23 ft above the top of the RPV flange)

Verify one RHR shutdown cooling subsystem is operating. (ITS SR 3.9.9.1)



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CONTROL ROOM SI	JRVEILLA	NCE I	.0G -	MODE	4,	CPS 5	90	00.01	L <u>D00</u>	2			
	MON	F-	UE	WEI	)	TH	U	FR	I	SZ	λT	St	JN
NSS AND BOP ANNUNCIATOR HIDDEN GROUND FAULT TES	<u>T</u> [Wednes	day M	IDA O Olly	nly] V									
NOTE			1										
If an annunciator card(s) has a hidden ground fault in	the system	being	tested,	it will a	ılarm	2.							
1. (Initial) Perform a NSS Hidden Ground Fault Test.	<ul> <li>A second s</li></ul>				жі. 2 ў.	1	x/x						
In 1H13-P630, depress Ground Fault Test push- and observe the Ground Fault lamp lights and annunciator "H13-P630 ANNUNCIATOR GRD FAULT" alarms, then release push-button.	-button verify (5006-1L)												
2. (Initial) Perform a BOP Hidden Ground Fault Test.						/	x/x				÷		
In 1H13-P6850, depress Ground Fault Test push and observe the Ground Fault lamp lights and annunciator "H13-P850 ANNUNCIATOR GRD FAULT" alarms, then release push-button.	h-button verify (5007-1D)												
0 THERMAL OVERLOAD PROTECTION (MOV Test Switches)													
(Initial) Once per eight hour period, verify thermal overload protection is bypassed for motor operated valves (MOV) required to be operable. Verify MOV Test Prep switches are in NORM position. (ORM TR 4.5.2.2) «CM-1»	m W/t	······			1		1		7			l V	1
<pre>1 SVC PROTECTION SYSTEMS [DAYs only] Verify required CPS 3800.02C003, E-Area Daily Rounds - SVC local panel checks are complete. (ITS SR 3.8.11.1)</pre>													
1. (Initial) RAT SVC Protection System	x/W/x	X/	/x	x/	/X	x/	/X	X/	/X	X/	/X	X/	/X
2. (Initial) ERAT SVC Protection System	X/ N/X	X/	/X	X/	/X	X/	/X	x/	/X	x/	/X	x/	/X

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Rev. 35b

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8.

8.

CONTROL ROOM SURVEILLANCE LOG - MODE 4, 5

							MON	TUE	WED	THU	FRI	SAT	SU	N	Í
8.12	AR,	<u>/PR RADIATION</u> Code Table	MONITORS	<u>5 CHANNEL CHE</u> 1 items on Pa	<u>СКS</u> ge 13.	(cont'd	1)	Today	1			· ·			
	13.	1RIX-PR004	[ODCM SR	2.7.1.1 T2.c	: (d)]	• • • •	WMA	J 1 1	1 1	1 1	/ /	11	/	/	
	14.	1RIX-PR005	[ODCM SR	2.7.1.1 T2.c	: (d)]		NA/MA/MA	, , ا	, ,	/ /	/ /	1 1	1	/	
	15.	1RIX-PR036	ODCM SR	2.7.1.1 T2.a	(d)]		W. W. +	1, 1	, ,	1 1	/ /		: 1	/	
	16.	1RIX-PR037	[ODCM SR	2.7.1.1 T2.a	(d)]		w Wid	1,1	11		1 1		/	1	
	17.	1RIX-PR038	ODCM SR	2.7.1.1 T2.1	(d)]		N.N.X	- , ,				1 1	/	/	
	18.	1RIX-PR039	[ODCM SR	2.7.1.1 T2.1	o (d)]	· .	" MA	×, ,	1 1	1 1	1 /	11	/	/	
	19.	1RIX-PR023	1/3/5/6	[Sunday	DAYs	only]							x/	/x	
	20.	1RIX-PR026	1/3/5/6	[Sunday	DAYs	only]							X/	/X	
	21.	1RIX-PR028	1/3/5/6	[Sunda]	DAYs	only]							x/	/x	
	22.	1RIX-PR030	1/3/5/6	[Sunday	DAYs	only]							x/	/x	
	23.	1RIX-AR001		[Sunday	DAYs	only]							x/	/x	
	24.	1RIX-AR003	-	[Sunday	DAYs	only]		<u>il - Kau</u> t			<u>i si si</u>	LANA STAL	X/	/x	
	25.	1RIX-AR002		[Sunday	DAYs	only]			e di Second	The Data Provide			X/	/x	
	26.	1RIX-AR017		(Sunday	DAYs	only]							x/	/x	

Rev. 35b

FRI

SAT

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CONTROL ROOM SURVEILLANCE LOG - MODE 4, 5

MON

	the second s				
8.12 AR/PR	RADIATION	MONITORS	CHANNEL	CHECKS	(cont'd

OUIX-PR050 should be used as the primary means of satisfying ORM Channel Checks.

Recorders 1UR-EM015 (60 meter wind velocity and direction), 1UR-EM016 (10 meter wind velocity and direction), and 1UJR-EM014 Pt. 3 (Delta Temperature) may be used to satisfy the channel checks when OUIX-PR050 is inoperable or not communicating (POLL OFF) with the AR/PR LAN.

TUE

WED

If OUIX-PR050 is inoperable or not communicating (POLL OFF) with the AR/PR LAN, contact the Buffer System Manager to notify IDNS that meteorological data will be unavailable.

If channel checks are performed with the recorders, a notation shall be made in the Comments section.

- (a) At all times.
- (b) When standby gas treatment system is in standby or operation.
- (d) Any time system is in service.
- (e) With fuel in the new fuel storage vault.
- (f) With irradiated fuel in the spent fuel pool.
- (g) During operations with a potential for draining the reactor vessel.
- (h) During CORE ALTERATIONS, and
  - during movement of irradiated fuel assemblies in the primary or secondary containment.
- (i) During movement of irradiated fuel assemblies in the fuel building.

#### 8.13 <u>SELF TEST SYSTEM</u> (ITS SR (see 2.1.7/8), ORM TR 4.2.14.1)

(Initial) Status indications of the STS shall be obtained at least once per 24 hours, whenever the STS is operating in the fully or partially automatic MODE.

W /x/x /x/x /x/x /x/x /x/x /x/x /x/x

STS Summary print-out per CPS 3513.01 (STS). NOTE anything other than fully automatic MODE for status keeping.

#### .14 SURVEILLANCE COMPLETION

(Record) Record finish time of CPS 9000.01D002.



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## CONTROL ROOM OPERATOR SURVEILLANCE LOG - MODE 4, 5 DATA SHEET

31 . J. A.

#### SUPPLEMENTAL REVIEW SHEET

## Corrective Action Taken

rability Requ	irements:
ITS LCOs:	see body of Data Sheet
ORM ORs:	see body of Data Sheet
ODCM ORs:	see body of Data Sheet
annliashla.	

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## As applicable:

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Initiated	Condition	Report No
	· · · · · · · · · · · · · · · · · · ·	

Initiated Work Document No.

Comments/Deficiencies

Review and Approval

1.5

- x - 1

Surveillance Coordinator:

(Signature)

(Date)



(	CLINTON POWER STATIO	N						
Job Performance Measure								
	JPM Number: SRO A.1.b.2							
	Revision Number: 02							
	Date: 04/15/2002							
Developed By:	C. Ware	4/17/02						
	Instructor	Date						
Validated By:	B Price	5/5/02						
-	SME or Instructor	Date						
Review By:	P. O'Brien	5/6/02						
-	Operations Representative	Date						
Approved By:	B. Price	5/22/02						
	Training Department	Date						

NRC SUBMITTAL COPY

C.L

# CLINTON POWER STATION

## JPM NUMBER: 031345J001 REVISION: 02 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 through 11 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, or simulator)
  - 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues 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 (\*).
    - Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. \_\_\_\_\_ Date \_\_\_\_\_
      - 9. Pilot test the JPM:
        - a. Verify cues both verbal and visual are free of conflict, and
        - b. Ensure performance time is accurate.
      - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
      - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME / Instructor – Signature / Printed

SME / Instructor - Signature / Printed

Date

Date

SME / Instructor - Signature / Printed

Date

Page 2 of 15

JPM NUMBER: \_\_\_\_031345J001

**REVISION: 02** 

## **Revision Record (Summary)**

Revision	Date	Description
00	Unknown	This is a new SRO Administrative JPM.
01	07/26/2001	JPM updated to new Exelon format.
02	04/15/2002	Updated JPM with EPU (power uprate) information

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•	JPM NUMBER: 031345J001 REVISION: 02
	Operator's Name:
	Job Title: $\Box$ NLO $\dot{\Box}$ RO $\Box$ SRO $\Box$ STA $\Box$ SRO Cert.
	JPM Title: Determine if Power, Flow, or Core Thermal Limits Have Been Exceeded – Faulted JPM Number: 031345J001
en de la mercanica de la succ	Task Number and Title: 01345C518 / Evaluate Core Thermal Limits During Power Operations
	K/A Number Generic 2.1.19 Importance 3.0
	Suggested Testing Environment: Any Location Where References are Available
	Actual Testing Environment:
	Testing Method:  Simulate Alternate Path / Faulted: Yes No Perform
	Time Critical: 🗌 Yes 🔳 No
	Estimated Time to Complete: 15 minutes Actual Time Used: minutes
	References: CPS 9820.01, Power Distribution Limits CPS 9820.01D001, Power Distribution Limits Data Sheet CPS Technical Specifications
	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         EVALUATION SUMMARY:
	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         EVALUATION SUMMARY:         Were all the Critical Elements performed satisfactorily?         Yes
	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         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:         CPS Satisfactory       Unsatisfactory
	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         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:         Comments:
·	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         EVALUATION SUMMARY:         Were all the Critical Elements performed satisfactorily?       Yes         The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:         Satisfactory       Unsatisfactory         Comments:
· · ·	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         EVALUATION SUMMARY:         Were all the Critical Elements performed satisfactorily?       Yes         The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:         Satisfactory       Unsatisfactory         Comments:
	References:       CPS 9820.01, Power Distribution Limits CPS 9820.01D001, Power Distribution Limits Data Sheet CPS Technical Specifications         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:
· · · · · · · · · · · · · · · · · · ·	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         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:
· · · · · · · · · · · · · · · · · · ·	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits         CPS Technical Specifications         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:
	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits         CPS Technical Specifications         EVALUATION SUMMARY:         Were all the Critical Elements performed satisfactorily?       Yes         The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:         Satisfactory       Unsatisfactory         Comments:
	References:       CPS 9820.01, Power Distribution Limits CPS 9820.01D001, Power Distribution Limits Data Sheet CPS Technical Specifications         EVALUATION SUMMARY:         Were all the Critical Elements performed satisfactorily?       Yes         The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:       Satisfactory         Comments:
	References:       CPS 9820.01, Power Distribution Limits         CPS 9820.01D001, Power Distribution Limits Data Sheet         CPS Technical Specifications         EVALUATION SUMMARY:         Were all the Critical Elements performed satisfactorily?       Yes         The operator's performance was evaluated against the standards contained in this JPM, and has been determined to be:         Satisfactory       Unsatisfactory         Comments:

#### JPM NUMBER: 031345J001

#### **REVISION: 02**

#### **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.

#### SIMULATOR SET-UP CONDITIONS:

Not Applicable

#### TASK STANDARDS:

- Perform CPS 9820.01, Power Distribution Limits with no deviation from the procedure.
- Identifies highest values of MFLCPR and MFLPD are > 1.0.
- Determines Tech Spec actions require restoration MFLCPR and MFLPD limits within 2 hours.

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

CPS 9820.01D001, Power Distribution Limits Data Sheet

#### **PROCEDURAL/REFERENCES:**

CPS 9820.01, Power Distribution Limits CPS 9820.01D001, Power Distribution Limits Data Sheet CPS Technical Specifications

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

#### INITIAL CONDITIONS AND INITIATING CUE:

You are the Control Room Supervisor. The Shift Manager discovers that daily surveillance CPS 9820.01, Power Distribution Limits needs to be completed prior to exceeding its frequency. All of the Reactor Operators are busy with other plant activities. The Shift Manager directs you to perform the daily surveillance CPS 9820.01, Power Distribution Limits. Report when the task is complete.

START TIME:

## JPM NUMBER: 031345J001

### **REVISION: 02**

#### **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

1	5.1	Notify Shift Management prior to performing procedure.								
	Standard:	Notifies Shift Management prior to performing procedure. Enters start date, start								
	Cue:	A oknowledge	tials CPS 98.	20.01D001, Power Distribution Limits Data Sheet.						
ara paténan	Comments:	Being the CI	RS would init	1. tial for notification						
		SAT I	UNSAT	Comment Number						
	<u></u>		~ 							
2	5.2	Verify Core	Thermal Pov	ver is $\geq 21.6\%$ of RTP.						
	Standard:	Verifies Core CPS 9820.01	e Thermal Po D001, Powe	ower is $\geq 21.6\%$ of RTP by checking the 3D Case. Initi- r Distribution Limits Data Sheet.						
	Cue:		,							
	Comments:									
		SAT U	JNSAT	Comment Number						

	NUMBER: <u>031</u>	<u>.345J001</u> REVISION: <u>02</u>
3	5.3	Check the applicable entry condition.
	Standard:	Determines that the applicable entry condition is Daily Surveillance. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.
	Cue:	
	Comments:	The entry condition was given in the initiating cue.
		SAT UNSAT Comment Number
4	5.4	Verify 3D Case ID has an 'M' in 2nd character.
	-Standard:	Determines that second character of 3D CASE ID is an 'M'. Initials CPS
	0	9820.01D001, Power Distribution Limits Data Sheet.
	Cue:	
	Commonis.	
		SAT UNSAT Comment Number
5	5.5	Check applicable RR pump status.
	Standard:	Would check RR pump status on DCS. Checks the appropriate box on CPS 9820.01D001, Power Distribution Limits Data Sheet.
	Cue:	Inform operator that 2 RR pumps are running.
	Comments:	
		SAT UNSAT Comment Number

*			CL	INTON PO. ADM	OWER STATION IIN JPM	
•••• ••• •	JPM	NUMBER:03	1345J001	·····	REVISION: <u>02</u>	
	6	5.6	Check applica	ble 3D Case	e OPTION line items:	
<b>Salayya</b> yan su ka sa aya ka aya			ARTS, D	UAL LOOP,	, MANUAL FLOW, SINGLE LOOP	
		Standard:	Checks the 3I FLOW boxes	Case and de should be ch	letermines that ARTS, DUAL LOOP, and MANUAL hecked. Checks ARTS, DUAL LOOP, and MANUAL	
		Cue	FLOW Doxes	on CPS 9820	0.01D001, Power Distribution Limits Data Sheet.	
, , , , , , , , , , , , , , , , , , ,		Comments:	This informat	ion is located	d to the right of OPTION on the 3D Case.	
terti a concentrati de la concentrati	er diversity from the g		SAT U	NSAT	Comment Number	
	7	8.2	From the 3D (	Case determin	ine the highest MAPRAT value.	
ugane (c. ). Constantination (c.	Katalogi sayasin	an in the state of t	Initial CPS 98	20.01D001 i	if MAPRAT ≤ 1.0.	
		Standard:	Determines th Power Distrib	e highest MA ution Limits	APRAT value is 0.821. Initials CPS 9820.01D001, Data Sheet.	
		Cue:				
		Comments:				
			SAT U	NSAT	Comment Number	

'M	NUMBER:031	<u>345J001</u> REVISION: <u>02</u>							
8	8.3	From the 3D Case determine the highest MFLCPR value.							
		Initial CPS 9820.01D001 if MFLCPR $\leq$ 1.0.							
	Standard:	Determines that the highest MFLCPR value is 1.003. Does NOT initial CPS 9820.01D001, Power Distribution Limits Data Sheet.							
	Cue:								
	Comments:	Two locations have MFLCPR value > 1.0 (37-28 & 39-26)							
		May insert a note documenting what was observed							
		SAT UNSAT Comment Number							
*9	8.4	SAT UNSAT Comment Number From the 3D Case determine the highest MFLPD value.							
*9	8.4	SATUNSATComment NumberFrom the 3D Case determine the highest MFLPD value.Initial CPS 9820.01D001 if MFLPD ≤ 1.0.							
*9	8.4	SATUNSATComment NumberFrom the 3D Case determine the highest MFLPD value.Initial CPS 9820.01D001 if MFLPD ≤ 1.0.							
*9	8.4 Standard:	SAT       UNSAT       Comment Number         From the 3D Case determine the highest MFLPD value.         Initial CPS 9820.01D001 if MFLPD ≤ 1.0.         Determines that the highest value of MFLPD is 1.002. Does NOT initial CPS 9820.01D001, Power Distribution Limits Data Sheet.							
*9	8.4 Standard: Cue:	SATUNSATComment NumberFrom the 3D Case determine the highest MFLPD value.Initial CPS 9820.01D001 if MFLPD ≤ 1.0.Determines that the highest value of MFLPD is 1.002. Does NOT initial CPS 9820.01D001, Power Distribution Limits Data Sheet.							
*9	8.4 Standard: Cue: Comments:	SATUNSATComment NumberFrom the 3D Case determine the highest MFLPD value.Initial CPS 9820.01D001 if MFLPD ≤ 1.0.Determines that the highest value of MFLPD is 1.002. Does NOT initial CPS 9820.01D001, Power Distribution Limits Data Sheet.One location has MFLPD value > 1.0 (17-22-18)							
*9	8.4 Standard: Cue: Comments:	SATUNSATComment NumberFrom the 3D Case determine the highest MFLPD value.Initial CPS 9820.01D001 if MFLPD ≤ 1.0.Determines that the highest value of MFLPD is 1.002. Does NOT initial CPS 9820.01D001, Power Distribution Limits Data Sheet.One location has MFLPD value > 1.0 (17-22-18)May insert a note documenting what was observed							
*9	8.4 Standard: Cue: Comments:	SATUNSATComment NumberFrom the 3D Case determine the highest MFLPD value.Initial CPS 9820.01D001 if MFLPD ≤ 1.0.Determines that the highest value of MFLPD is 1.002. Does NOT initial CPS 9820.01D001, Power Distribution Limits Data Sheet.One location has MFLPD value > 1.0 (17-22-18)May insert a note documenting what was observed							

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JPM N	NUMBER:031	345J001 REVISION: <u>02</u>
*10	8.5	Immediately contact Shift Management if any of the following conditions occur so that corrective action may be taken in accordance with the appropriate ITS:
		• MAPRAT is > 1.0.
		• MLCPR is > 1.0.
		• MFLPD is > 1.0.
red to the	Standard:	Notifies Shift Management that MFLCPR and MFLPD are out of specification.
	Cue:	Acknowledge notification.
		If earlier 3D printouts are requested state the previous 3D are within limit
	Comments:	As the CRS may start taking actions to correct such as contacting the RE and reviewing the LCO for applicability. This would constitute adequate notification.
		SAT UNSAT Comment Number
11	8.6	Notify Shift Management of surveillance completion.
	Standard:	Notifies Shift Management of surveillance completion. Enters stop date, stop time and initials CPS 9820.01D001, Power Distribution Limits Data Sheet.
	Cue:	Acknowledge notification.
		Once reported, ask what would you do?
	Comments:	
		SAT UNSAT Comment Number

5

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 $(x,y)(x,y,y) \in \{x,y\}$ 

Page 10 of 15

JPM [	NUMBER	: 0313	345J001		-	REVISION: <u>02</u>
12	8.7		A copy CPS 98	y of 3D Case used \$20.01D001, Pov	l shall be signed, dated, l ver Distribution Limits D	abeled "9820.01", and attached to pata Sheet.
	Star	ndard: Cue:	Attach Power	es a signed, dated Distribution Lim	l, labeled copy of the 3D its Data Sheet.	Case used to CPS 9820.01D001,
	Comr	ments:				
			SAT	UNSAT	Comment Number	
*13	9.1		Failur to com review	e to meet the Ac ply with the ap yed to identify th	ceptance Criteria given plicable LCO. Tech Spe te Action Statements nec	below shall constitute a failure ecs should be immediately eded for implementation.
*13	9.1		Failur to com review	e to meet the Ac uply with the appropriate to identify the MAPRAT is $\leq 1$	ceptance Criteria given plicable LCO. Tech Spe le Action Statements new .0.	below shall constitute a failure ecs should be immediately eded for implementation.
*13	9.1		Failur _to com review	e to meet the Ac uply with the appred to identify the MAPRAT is $\leq 1$ MLCPR is $\leq 1.0$ MFLPD is $\leq 1.0$	ceptance Criteria given plicable LCO. Tech Spe le Action Statements new .0.	below shall constitute a failure ecs should be immediately eded for implementation.
*13	9.1 Star	ndard:	Failur to com review	e to meet the Ac ply with the appred to identify the MAPRAT is $\leq 1$ MILCPR is $\leq 1.0$ MILCPR is $\leq 1.0$ MIFLPD is $\leq 1.0$ LCOs 3.2.2 and tion of limits with	ceptance Criteria given plicable LCO. Tech Spe te Action Statements net .0. 	below shall constitute a failure ecs should be immediately eded for implementation. COs 3.2.2 and 3.2.3 actions require
*13	9.1 Star	ndard: Cue:	Failur to com review • • Enters restora If the S Data sl	e to meet the Ac uply with the appred to identify the MAPRAT is $\leq 1$ MILCPR is $\leq 1.0$ MILCPR is $\leq 1.0$ LCOs 3.2.2 and tion of limits with Supplemental Rep-	ceptance Criteria given plicable LCO. Tech Spe the Action Statements new .0.            	below shall constitute a failure ecs should be immediately eded for implementation. COs 3.2.2 and 3.2.3 actions require udent that it is at the bottom of the
*13	9.1 Star Comr	ndard: Cue: nents:	Failur to com review Enters restora If the S Data sl	e to meet the Ac apply with the apply red to identify the MAPRAT is $\leq 1$ MLCPR is $\leq 1.0$ MFLPD is $\leq 1.0$ LCOs 3.2.2 and tion of limits with Supplemental Rep- heet.	ceptance Criteria given plicable LCO. Tech Spe the Action Statements net 0. 0. 3.2.3. Determines that Lu hin 2 hours. view sheet, inform the stu	below shall constitute a failure ecs should be immediately eded for implementation. COs 3.2.2 and 3.2.3 actions require adent that it is at the bottom of the

## **JPM NUMBER:** 031345J001

## **REVISION: 02**

### **TERMINATING CUES:**

Daily surveillance CPS 9820.01, Power Distribution Limits is complete. LCOs 3.2.2 and 3.2.3 are entered.

**STOP TIME:** 

K/A REFEREN	CE NUMBERS		
		Importanc	e Rating
<u>K/A System Number</u>	K/A Number	<u>RO</u>	SRO
Generic	2.1.19	3.0	3.0

JPM NUMBER: 031345J001

## **INITIATING CUE**

You are the Control Room Supervisor. The Shift Manager discovers that daily surveillance CPS 9820.01, Power Distribution Limits needs to be completed prior to exceeding its frequency. All of the Reactor Operators are busy with other plant activities. The Shift Manager directs you to perform the daily surveillance CPS 9820.01, Power Distribution Limits. Report when the task is complete.

## JPM NUMBER: 031345J001

## **REVISION: 02**

	PAGE	1											
	0000 0				CL	INTO	N CYCLE	9	SEQU	JENCE	NO 23		
	CORE PA	ARAMETER	; 		3D 1910	MON.	ICORE		8-0	JUN-2	002 17:	58 CALCU	JLATED
	POWER	MWE	203	, U.	PE	KIUD.	IC TOG		0~0 (7) (1)	2-דעוטע מיז ק	.002 ביו ביאוד ה10 ה	07002050	
	FUNER	MTD/UD	76 1	02	CAT	יםם י	פווד שפ		DEGU	עב נ יידים גיי		07002030	245
	LTOW	MLD/ MK	0.1	124	CUT		50112		LDDN	ע פעז געיג ז	DE - EU	LT. CODE	545
t of logar	SUBC	ם ז/ ווידים	23	10	Kof	F	1	0000	LEN	1 JUA	<u>165 – 10</u>	LL CORE	
i i i i i i i i i i i i i i i i i i i		DIU/LD	1027	49	VEL.	יידיסראו	ц. 6. – 5. Т.	52	TON	אדד ר		DV	
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	110210		1.2							-			
	CORREC	TION FAC	OR: ME	LCPR=	= 1.0	000	MFLPD=	1.000	) MAI	?RAT=	- 0.999		
	OPTION	ARTS	DÜ	JAL LO	DOP		MANUAL	FLOW	MCI	PRLIM	= 1.240		
			MOST	LIM	TIN	G LOO	CATIONS	(NON-	-SYMME	ETRIC	2)		
	MFLCPR	LOC	MFLPD	1	LOC		MAPRAI	נ י	LOC		PCRAT	LOC	
	1.003	37-28	1.002	17-	-22-3	18	0.821	7-	-28- 5	5	0.798	41-28-3	16
	1.001	39-26	0.912	7-	-28-	5	0.817	15-	-30-10	5	0.798	19-28-2	16
	0.996	41-28	0.912	41-	-28-3	16	0.817	11	-22-13	3	0.797	7-28-	5
	0.973	11-28	0.902	19-	-28-3	16	0.816	19	-26-16	5	0.791	39-22-2	20
	0.940	13-32	0.896	15-	-38-3	18	0.813	19-	-30-1	5	0.782	9-22-3	13
	0.939	9-26	0.895	21-	-26-3	16	0.803	7	-26-12	2	0.779	11-20-3	13
	0.937	11-20	0.893	17-	-26-	16	0.802	9-	-36-13	3	0.779	17-26-1	16
	0.930	39-22	0.889	9-	-22-	13	0.798	11.	-30-1	-	0.777	11-28-3	15
	0.927	7-28	0.889	11.	-20-	13	0.796	. 9.	-26- 5	ō	0.776	13-32-1	16
	0.923	9-22	0.888	13-	-32-	16	0.795	39-	-22-20	J	0.//4	47-26	12
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	49		Y		1.21.1	1.51					02	0.446	24
	T.										04	0.804	23
	45			12		12					06	0.963	22
											08	1.056	21
	41				Ρ						10	1.158	20
	L										12	1.191	19
	37		12	10	С	10	12				14	1.163	18
											16	1.182	17
	33										18	1.220	16
	L										20	1.215	15
	29										22	1.187	14
											24	1.212	13
	25										26	1.207	12
	L		10	10		10	10				28	1.181	10
	21		12	10		10	12				30	1 166	10
	17			D							34	1 131	09
	1/ T			D							36	1 085	00
	13			12		12					38	1.072	06
	10			12		12.					40	1.050	05
	09										42	0.998	04
	L				М						44	0.920	03
	05	L	L	L		L	L		L		46	0.749	02
	04	08 12	16 20	24	28	32	36 40	44	48	52	48	0.237	01
	CORE A	VERAGE R	ADIAL PO	OWER	DIST	RIBU	TION			_			
	RING #		2	3		4	5	6		7			
	KEL PW	0.890	1.084	1.113	I	.102	1.155	1.14	5 0.	121			

INSTRUMENT READINGS/STATUS SEQUENCE NO 23

PAGE 2

CLINTON CYCLE 9

JPM NUMBER:031345J001						REVISION: 02			
an a			CALIBE	ATED L	PRM RE	ADINGS	8-JUN-2002 17:58 CAL	CULATED	
							8-JUN-2002 17:59 PRI	NTED	
47D		40.1	49.8	55.7	45.9	30.2	CASE ID FMLD195070820	5855	
С		57.0	59.8	60.3	64.5	43.0	LPRM SHAPE - FULL COR	E	
В		61.2	63.6	60.9	69.2	41.9			
A		51.1	54.9	49.5	63.0	27.7	# OF TIPS REJECTED	: 1	
39D	35.4	51.3	58.4	61.1	57.5	46.0	FAILED SENSORS:		
C	55.8	62.7	60.3	59.6	66.5	67.9	LPRM ( 2 SIGNAL F.	AILED)	
• • • • B	60.0	65.2	60.7	57.0	66.7	70.2	615A 3815D		
A A	52.7	61.1	50.4	44.4	54.7	63.8	LPRM ( O PANACEA :	REJECTED)	
							OTHER SENSORS ( 0	TOTAL)	
31D	39.9	51.6	55.8	56.0C	55.7	48.5	SUB RODS		
С	63.7	71.1	68.3	63.1	72.6P	70.4	NONE		
В	69.6	71.2	66.7	59.2	72.9	73.4			
A	67.6M	69.0	61.1	45.4	71.1	71.8	T = TIP RUN RECOMM	ENDED	
230	40.0	54 3	58.1	57 9	59 5	48 0	M = MAPRAT LOCATION	N	
۔ د د	62 2	67 3D	63 7	59 2	66 8	69 0	D = MELPD LOCATION		
B	67 1	67 1	61 /	56 9	66 6	71 1	D = DCDAT IOCATION		
ם א	66 5	50 6	10 7	11 2	55 6	66 1	* - MULTIDE LIMIT		
, A	00.5	50.0	40.7	44.2	55.0	00.1	- MOBITEDE DIMIT		
15D	28.5	46.2	55.5	57.2	0.0	39.4			
С	42.4	63.6	62.8	59.1	65.4	59.1			
В	43.2	68.6	61.9	57.4	67.6	62.2			
А	0.0	61.7	49.9	44.3	64.3	50.4			
07D		29.1	39.3	40.7	36.6				
С		41.4	58.6	56.6	54.5				
В		42.3	64.8	61.8	58.3	North Control and			
А		31.2	57.2	55.6	48.4				
	06	14	22	30	38	46			
CORE	SUMMAI	RY							
CORE POW	ER 8'	3.2%	CALC	SUB FLO	าพ	91.3%	DP MEAS PST	15 52	
CORE FLO	W 91	ጋ በ <u>ዩ</u>	OPER	SUB FL	าพ	-1 2%	DP CALC PST	20 52	
LOAD LIN	ר א ד פו	a ag	FLOW	BAGIG		MEDG	FERDITE FION MIR/UP	12 35	
UAUN UIN	ы 0;	1.20		UUUIU		IIIA0	THE THE THE THE THE TREE	12.33	
APRM	CALIBI	RATION							
	A	В		С	D				
READING	83.7	83	.9	83.5	83.5				
AGAF	0.994	0.99	92 0	.997	0.997				

TIP RUNS RECOMMENDED STRINGS: NONE



NRC SUBMITTAL COPY

#### JPM NUMBER:

#### **REVISION: 00**

## 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 through 11 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, or simulator)
- 4. Initial setup conditions are identified.

**SRO A.2.2** 

- 5. Initiating and terminating cues 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 (\*).
  - Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. \_\_\_\_ Date \_\_\_\_\_
    - Pilot test the JPM:
       a. verify cues both verbal and visual are free of conflict, and
       b. ensure performance time is accurate.
    - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
    - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

Page 2 of 11

JPM NUMBER:

SRO A.2.2

**REVISION:** 00

## **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

## CLINTON POWER STATION

ADMIN JPM

JEWINUWIDER: SKU A.2.2	$REVISION:  \underline{UU}$
	n 19 an
Operator's Name:	
Job Title:  SRO	
JPM Title: Review surveillance and recognize entry condition	n to Reactor Coolant
leakage off-Normal(Faulted)	
JPM Number: SRO A.2.2	
Revision Number: 00	
Took Number and Titley Knowledge of surveillence precedures	
Task Number and The. Knowledge of survemance procedures	3
	GDO 2.4
K/A Number: A2.2.12 Importance	SRU 3.4
Suggested Testing Environment: Any	
Actual Testing Environment: 🔲 Simulator 🔅 🗍 Plant	Control Room
Testing Method: 🔲 Simulate Alternate Path / Faulted.	
Douform	
lime Critical: 🖵 Yes 🔳 No	
<b>Estimated Time to Complete:</b> <u>10</u> minutes <b>Actual Time</b>	Used: minutes
References: CPS 9000.01, CONTROL ROOM SURVEILLA	NCE LOG, Revision 33
CPS 9000.01D001, CONTROL ROOM SURVE	LLANCE LOG -

MODE 1, 2, 3, DATA SHEET, Revision 46, Section 8.10

JPM NUMBER: SRO A.2.2	REVISION: 00
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EVALUATION SUMMARY: Were all the Critical Elements performed satis	tactorily? 🗖 Yes 🔲 No
were un the entited Diements performed built	
The operator's performance was evaluated aga	ainst the standards contained in this JPM,
and has been determined to be:	ctory 🖵 Unsatisfactory
Comments:	
Evaluator's Name:	
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### 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.

#### SIMULATOR SET-UP CONDITIONS:

N/A

## TASK STANDARDS:

Review of the Reactor Coolant Leakage verification and calculation (CPS 9000.01D001, Control Room Surveillance Log – Mode 1, 2, 3 Data Sheet) enter CPS 4001.02 Reactor Coolant Leakage is required.

#### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

#### **PROCEDURAL/REFERENCES:**

CPS 9000.01, CONTROL ROOM SURVEILLANCE LOG, Revision 33 CPS 9000.01D001, CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3, DATA SHEET, Revision 46, Section 8.10

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

The following errors errors are in the log and may be identified:

- 8.10.3.c) Reading selected from 8 hours before vice 24 hours before.
- 8.10.3.i) Failure of the log taker to identify discrepancies to Shift Management:
  - Reduction in calculated leakage rate from previous shifts
  - Difference between calculated leakage rate and leakage rate recorded from recorders 1E31-R552 and 1E31-R551
  - Exceeding the Comparison Guideline of 1.4 gpm
  - Entry condition to CPS 4001.01, Reactor Coolant Leakage met (≥2.5 gpm unidentified leakage)

Give the examinee the attached copy of CPS 9000.01D001, DW Floor Drain Leakage calculation and verification after you have presented the Initial Conditions and Initiating Cue.

#### JPM NUMBER: SRO A.2.2

## **INITIAL CONDITIONS AND INITIATING CUE:**

The unit is in Mode 1 at full power. The Tuesday Swing shift Control Room Surveillance Log has been completed. You are directed to review the Swing shift's Drywell Floor Drain Leakage Rate calculation.

Report when you have completed the review.

START TIME:

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#### JPM NUMBER: SRO A.2.2

### **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 9000.01D001		
*1.	Reviews the Tuesday Swing shift DW Floor Drain leakage calculation and verification and enters CPS 4001.01, Reactor Coolant Leakage.	
Standard	<ul> <li>Indentifies entry condition to CPS 4001.01, Reactor Coolant Leakage met (≥2.5 gpm unidentified leakage)</li> </ul>	
CUE	If redirected to reperform acknowledge the direction	
Comments	May also identify the following errors:	
	8.10.3.c) Reading selected from 8 hours before vice 24 hours before.	
	8.10.3.i) Failure of the log taker to identify discrepancies to Shift Management:	
	• Reduction in calculated leakage rate from previous shifts	
	<ul> <li>Difference between calculated leakage rate and leakage rate recorded from recorders 1E31-R552 and 1E31-R551</li> </ul>	
	• Exceeding the Comparison Guideline of 1.4 gpm (calculated)	
·····	SAT UNSAT Comment Number	
## JPM NUMBER: SRO A.2.2

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2.	Directs reperformance of the Control Room Operator Surveillance Log – Mode 1, 2, 3 Data Sheet Supplemental Review Sheet							
Standard	Log redirected to resolve/correct log							
CUE	f redirected to reperform acknowledge the direction. State 5 minutes have gone by and provide a corrected calculated value of 2.72 GPM							
Comments	This may not be performed due to entry into the CPS 4001.01, Reactor Coolant Leakage and this JPM have evaluated the examinee ability to recognize the entry condition completing this JPM							
	SAT UNSAT Comment Number							

#### **TERMINATING CUES:**

Review the DW Floor Drain leakage verification log and recognizes entry condition to CPS \_\_\_\_\_4001.01, Reactor Coolant Leakage.

## **STOP TIME:**

## **K/A REFERENCE NUMBERS**

**Importance Rating** 

K/A SYSTEM NUMBER GENERIC K/A NUMBER 2.2.12  $\frac{\mathbf{RO}}{3.0} \qquad \frac{\mathbf{SRO}}{3.4}$ 

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### **INITIATING CUE**

The unit is in Mode 1 at full power. The Tuesday Swing shift Control Room Surveillance Log has been completed. You are directed to review the Swing shift's Drywell Floor Drain Leakage Rate calculation.

Report when you have completed the review.

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#### JPM NUMBER: SRO A.2.2

#### **REVISION: 00**

#### **CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET**

CPS 9000.01D001

MON	Today	WED	THU	FRI	SAT	SUN
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#### 8.10 REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE

#### <u>NOTE</u>

CPS 4001.01, Reactor Coolant Leakage shall be entered if any of the following leakage rates are observed:

- Any ITS LCO 3.4.5 RCS Operational LEAKAGE limitation is exceeded.
- Unidentified LEAKAGE increase of  $\geq 0.5$  gpm in a 4 hour period (1.0 gpm in 8 hours).
- Unidentified LEAKAGE exceeds 2.5 gpm.
- 1. (Record) Flow Readings From 1H13-P855 (at  $\approx$  8 hour intervals)
- a) Time readings taken

 b) DW FLR FLOW FROM SUMP TOTAL (ITS LCO 3.4.5 (a))
 If the Sump (bubblier level) Flow Detector totalizer in

step 8.10.1.b is not functioning, use alternate Pump (magnetic motor) Flow Detector totalizer data in step 8.10.1.c for unidentified leakage calculations

- c) DW FLR FLOW PMP DISCH TOTAL (ITS LCO 3.4.5 (a))
- d) DW EQUIP FLOW

(ITS LCO 3.4.5 (a))

If DW Equip<sup>†</sup>Flow Totalizer is not functioning, a Manual Determination of DW RE In-Leakage D Flow Rate shall be performed using methodology described in CPS 3315.02, Leak Detection (LD) S and recorded in step 8.10.4.g.1.

М	0005	0010			
D	0810	0810			
s	1615	1615			

М	048931	052009			
D	049987	053155			
s	051043	054672			

М	NA	NA			
D	NA	NA			
S	NA	NA			
М	NA	NA			
۶D	NA	NA			
gy	NA	NA	 	 	

#### JPM NUMBER: <u>SRO A.2.2</u>

#### **REVISION: 00**

### CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET

CPS 9000.01D001

MON	Today	WED	THU	FRI	SAT	SUN
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### 8.10 <u>REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE</u> (cont'd)

- 2. <u>DW Floor Drain Sump Flow Rate Verifications</u> (at  $\approx$  8 hour intervals)
  - a) Check instrument used:

If the preferred DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1 is not functioning, use the alternate DW FLR DRN (PUMP) FLOW, LOW RANGE, 1E31-R551, Channel 1.

- b) (Record Monday only) Enter the DW FLR DRN FLOW, LOW RANGE values from Sunday. (From step 8.10.2.c)
- c) (Record) Enter the DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1, <u>or</u> alternate

DW FLR DRN (PUMP) FLOW, LOW RANGE 1E31-R551, Channel 1.

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	X SUMP	X SUMP	□ SUMP				
	D PUMP	🗆 PUMP	D PUMP	D PUMP	D PUMP		🗆 PUMP
							s.
L							

М	2.1			
D	2.1			
S	2.2			

М	2.2	2.4			
D	2.2	2.4			
S	2.2	2.8			-

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## CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET

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- REACTOR COOLANT SYSTEM OPERATIONAL LEAKAGE (
  - d) (Initial) (MODE 1)
     Verify current DW Floor Drain/ flow rate is ≤ 2 gpm above any reading of the previous 24 hours. (ITS SR 3.4.5.1)
  - e) (Initial) Verify ≤ 5 gpm on DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552 Channel 1 <u>or</u> alternate DW FLR DRN (PUMP) FLOW, LOW RANGE 1E31-R551, Channel 1. (ITS SR 3.4.5.1)

MON	Today	WED	THU	FRI	SAT	SUN
(cont'd)						
DS	DS					
BR	BR					
JG	JG					
			·····			
DS	DS					
BR	BR					
JG	JG					
		•				

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#### **REVISION:** <u>00</u>

CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET

CPS 9000.01D001

				MON	Today	WED	THU	FRI	SAT	SUN
8.10	RE	ACTOR COOLANT SYSTEM - OPERATIONAL LEA	KAGE	(cont'd)						
	3.	Unidentified Leakage Calculation using Flow Totalizer								
	a)	Check instrument used: If the preferred DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1 is not functioning, use the alternate DW FLR DRN (PUMP) FLOW, LOW RANGE, 1E31-R551, Channel 1.		X SUMP	X SUMP	□ SUMP □ PUMP	□ SUMP □ PUMP	□ SUMP □ PUMP	- SUMP - PUMP	□ SUMP □ PUMP
	b) c)	(Record) The current value of DW FLR FLOW SUMP TOTAL from step 8.10.1.b or alternate DW FLR FLOW PMP DISCH TOTAL from step 8.10.1.c. (Record) The value of DW FLR SUMP FLOW taken $\approx 24$ hours before (DW FLR FLOW PMP DISCU TOTAL alternate)	<u>M</u> b) c) d) e) f)	048931 045907 <u>3024</u> 1440 2.10	$\begin{array}{r} \underline{052099}\\ \underline{048931}\\ \underline{3168}\\ \underline{1445}\\ \underline{2.19} \end{array}$					
	d) _	Sunday's value: <u>045907 / 046915 / 047923</u> (Record) The total number of gallons by subtracting c) from b).	b) c) d) e) f)	049987 046915 3072 <u>1440</u> 2.13	053155 049987 3168 1440 2.2			·		
	e) f)	<ul><li>(Record) The number of minutes since reading in item c).</li><li>(Record) Flow rate since last reading: Reading from d) divided by elapsed time e).</li></ul>	S           b)           c)           d)           e)           f)	$\begin{array}{r} \underline{051043}\\ \underline{047923}\\ \underline{3120}\\ \underline{1440}\\ \underline{2.17} \end{array}$	$\begin{array}{r} \underline{054960}\\ \underline{053155}\\ \underline{1805}\\ \underline{1440}\\ \underline{1.25} \end{array}$					·

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8.10



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CPS 9000.01D001

		MON	Today	WED	THU	FRI	SAT	SUN
REACTOR COOLANT SYSTEM - OPERATIONAL LI	EAKAGE	(cont'd)						
g) (Record) Enter the	М	2.1	2.3					<u> </u>
DW FLR DRN (SUMP) FLOW, LOW RANGE	D	2.1	2.3					
from recorder 1E31-R552, Channel 1.	S	2.2	2.4					
h) (Record) Enter the	М	2.2	2.4					1
DW FLR DRN (PUMP) FLOW, LOW RANGE	D	2.2	2.4					
from recorder 1E31-R551, Channel 1.	S	2.2	2.8					
3. Unidentified Leakage Calculation using Flow Totalized	zer (cont	'd)						
<ul> <li>i) (Initial) Perform Channel Check of the calc DW Floor Drain Sump flow rate (Step f above) and I FLOOR DRAIN (SUMP) and (PUMP) FLOW rates (g above).</li> </ul>	culated DW g and h	DS/BR/JG	DS/BR/JG	/ /		1 1	1 1	1 1

Comparison Guideline: 1.4 gpm

If MODE of operation of Sump Pumps (auto/manual) is changed, then at least 2 pump out cycles must occur before a reliable Channel Check can be performed. JPM NUMBER: SRO A.2.2

### CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DDATA SHEET SUPPLEMENTAL REVIEW SHEET

Review and Approval Surveillance Coordinator:			
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	<u>a na antipatra de la constante de la constante</u>	an a	
			ntorranan Circo di Antorra di
omments/Deficiencies			
Initiated Work Do	cument No		
s applicable: Initiated Condition	Report No.		
ODCM ORs:	see body of Data Sheet		
ORM ORs:	see body of Data Sheet		
ITS LCOs:	see body of Data Sheet		
perability Requirements:			

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restable:

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## CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET

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			MON	1	Today	WED	THU	FRI	SAT	SUN
8.10	RE	ACTOR COOLANT SYSTEM - OPERATIONAL LEAKA	<u>GE</u> (cont'd)					<b>PV</b>		
2.	<u>DV</u> int	<u>V Floor Drain Sump Flow Rate Verifications</u> (at ≈ 8 hour ervals)					K	<b>B</b> y		
	a)	Check instrument used:								
		If the preferred DW FLR DRN (SUMP) FLOW,	X SUM	P	X SUMP	🗆 SUMP	🗆 SUMP	🗆 SUMP	🗆 SUMP	🗆 SUMP
		LOW RANGE 1E31-R552, Channel 1 is not functioning, use the alternate DW FLR DRN (PUMP) FLOW, LOW RANGE, 1E31-R551, Channel 1.		P	d PUMP	d pump	d PUMP	d PUMP	d PUMP	D PUMP
	b)	(Record - Monday only) Enter the DW FLR DRN FLOW, LOW RANGE values	1 2.1		u analysi a angla i sisa.	tendalezartal contain a containe a containe contai contain containe cont		a Provinsi Provinsi Provinsi Sana ang Provinsi Provinsi Sana ang Provinsi Provinsi		
		Irom Sunday. (From step 8.10.2.c)	2.1							
		5	2.2			adar yang san				a sur a s
	c)	(Record) Enter the DW FLR DRN (SUMP) FLOW, LOW RANGE	1 2.2		2.4					
		IE31-R552, Channel 1, <u>or</u> alternate	2.2		2.4					
		DW FLR DRN (PUMP) FLOW, LOW RANGE 1E31-R551, Channel 1.	2.2	$\mathcal{E}$	2.8					
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### CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET

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		the second s				
MON	Today	WED	THU	FRI	SAT	SUN
				the second se		and the second se

### 8.10 <u>REACTOR COOLANT SYSTEM - OPERATIONAL LEAKAGE</u> (cont'd)

 d) (Initial) (MODE 1) Verify current DW Floor Drain/ flow rate is ≤ 2 gpm above any reading of the previous 24 hours. (ITS SR 3.4.5.1)

SRO A.2.2

М	DS	DS			
D	BR	BR			
s	JG	JG			
М	DS	DS			
D	BR	BR			
S	JG	JG			

KEY

 e) (Initial) Verify ≤ 5 gpm on DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552 Channel 1 or alternate

DW FLR DRN (PUMP) FLOW, LOW RANGE 1E31-R551, Channel 1. (ITS SR 3.4.5.1) JPM NUMI

: SRO A.2.2

## **CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET**

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				MON	Today	WED	THU	FRI	SAT	SUN
3.10	RE	EACTOR COOLANT SYSTEM - OPERATIONAL LEA	<u>KAGE</u>	(cont'd)					/	
	3.	Unidentified Leakage Calculation using Flow Totalizer					K	CY	7	
	a)	Check instrument used:								1
		If the preferred DW FLR DRN (SUMP) FLOW, LOW RANGE 1E31-R552, Channel 1 is not functioning, use the alternate DW FLR DRN (PUMP) FLOW, LOW RANGE, 1E31-R551, Channel 1.		X SUMP	X SUMP	□ SUMP □ PUMP	o sump d pump	i Sump i Pump	□ SUMP □ PUMP	□ SUMP □ PUMP
	b)	(Record) The current value of DW FLR FLOW SUMP TOTAL from step 8.10.1.b or alternate DW FLR FLOW PMP DISCH TOTAL from step 8.10.1.c.	<u>M</u> b) c) d)	048931 045907 3024	052099 048931 3168					
	c)	(Record) The value of DW FLR SUMP FLOW taken ≈ 24 hours before (DW FLR FLOW PMP DISCH TOTAL, alternate)	e) f) D	<u>1440</u> <u>2.10</u>	<u>1445</u> <u>2.19</u>					 
	d)	Sunday's value: 045907 / 046915 / 047923 (Record) The total number of gallons by subtracting	b) c) d)	049987 046915 <u>3072</u>	053155 049987 3168					
		c) from b).	f)	<u>1440</u> <u>2.13</u>	<u>1440</u> <u>2.2</u>					
	e)	(Record) The number of minutes since reading in item c).	<u>S</u> b)	051043	054960	2				
	f)	(Record) Flow rate since last reading: Reading from d) divided by elapsed time e).	c) d) e) f)	<u>047923</u> <u>3120</u> <u>1440</u> <u>2.17</u>	$\begin{array}{c} 053155 \\ 1805 \\ 1440 \\ 1.25 \\ 2 \end{array}$	}				
						Misc	C.l.		· · · · · · · · · · · · · · · · · · ·	L

11135 (all) and should be 272 greater then 2.5

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# **CONTROL ROOM SURVEILLANCE LOG - MODE 1, 2, 3 DATA SHEET**

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**SION: 00** 

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			MON	Today	WED	THU	FRI	SAT	SUN
<u>R</u> E	ACTOR COOLANT SYSTEM - OPERATIONAL LE	<u>AKAGE</u>	(cont'd)						
g)	(Record) Enter the	М	2.1	2.3					
	DW FLR DRN (SUMP) FLOW, LOW RANGE	D	2.1	2.3			-		
	from recorder 1E31-R552, Channel 1.	S	2.2	2.4					
h)	(Record) Enter the	М	2.2	2.4			1	T	
	DW FLR DRN (PUMP) FLOW, LOW RANGE	D	2.2	2.4					
	from recorder 1E31-R551, Channel 1.	S	2.2	2.8	······································				
3.	Unidentified Leakage Calculation using Flow Totalize	er (cont'	d)		>2.5		-l		
	i) (Initial) Perform Channel Check of the calcu DW Floor Drain Sump flow rate (Step f above) and D FLOOR DRAIN (SUMP) and (PUMP) FLOW rates (g above).	llated W and h	DS/BR/JG	DS/BR/JG	1 1				
	Comparison Guideline: 1.4 gpm							/ /	
	If MODE of operation of Sump Pumps (auto/manual) is changed, then at least 2 pump out cycles must occur before a reliable Channe Check can be performed.	el				l	Ke	SY	





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## JPM NUMBER: SRO A.3.2

## **REVISION:** <u>00</u>

## JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: A	Il steps of this checklist should be performed upor M usage, revalidate JPM using steps 8 through 1	on initial validation. Prior to 11 below.
	1. Task description and number, JPM description identified.	ption and number are
	2. Knowledge and Abilities (K/A) reference	s are included.
	3. Performance location specified. (in-plant,	control room, or simulator)
	4. Initial setup conditions are identified.	
	5. Initiating and terminating cues are proper	ly identified.
	6. Task standards identified and verified by	SME review.
	7. Critical steps meet the criteria for critical an asterisk (*).	steps and are identified with
	<ol> <li>Verify the procedure referenced by this JI revision of that procedure: Procedure Rev Date</li> </ol>	PM matches the most current
· · · · · · ·	<ol> <li>Pilot test the JPM:</li> <li>a. verify cues both verbal and visual are fib. ensure performance time is accurate.</li> </ol>	ree of conflict, and
	10. If the JPM cannot be performed as writter revise the JPM.	n with proper responses, then
	11. When JPM is revalidated, SME or Instruc page.	tor sign and date JPM cover
	SME/Instructor	Date
	SME/Instructor	Date

## JPM NUMBER: SRO A.3.2

## **REVISION:** <u>00</u>

**Revision Record (Summary)** 

1. Revision 00, This is a new JPM

### JPM NUMBER: SRO A.3.2

#### **REVISION: 00**

JPM Title: Request Radiation Exposure Extension. JPM Number: SRO A.3.2 Revision Number: <u>00</u> Task Number and Title: Ability to perform procedures to reduce excessive levels of radiation and guard against personnel exposure.

K/A Number 2.3.10 Importance 3.3

Suggested Testing Environment: Any

Actual Testing Environment: Simulator Plant Control Room

Testing Method:□SimulateAlternate Path / Faulted: □YesNo■Perform

Time Critical: 🛛 Yes 🖉 No

Estimated Time to Complete: 40 minutes Actual Time Used: minutes

**References:** 

RP-AA-203, Exposure Control and Authorization

CLINT	ON POWER STATION
JPM NUMBER: SRO A.3.2	ADMIN JPM REVISION: 00
EVALUATION SUMMARY:	
Were all the Critical Elements perfor	med satisfactorily? 🖸 Yes 🖬 No
The operator's performance was eval and has been determined to be: $\Box$	luated against the standards contained in this JPM, Satisfactory
Comments:	
· · · · · · · · · · · · · · · · · · ·	
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Evaluator's Name	

### CLINTON POWER STATION ADMIN JPM REVISION: 00

### JPM NUMBER: SRO A.3.2

### 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.

### SIMULATOR SET-UP CONDITIONS:

None

### TASK STANDARDS:

Determine Bob has the lowest exposure and fill out Section I of Attachment 1 of RP-AA-203

# TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS: None

### **PROCEDURAL/REFERENCES:**

RP-AA-203, Exposure Control and Authorization

### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

### **INITIAL CONDITIONS AND INITIATING CUE:**

- 1. You are the WCS, the Unit is at 50% power.
- 2. An operator is required to support the FIN team during the repair of valve 1FW042A "Rx Feedwater Flow Inst Root" in the Aux Bldg STEAM TUNNEL.
- 3. If the work is not completed this shift the Unit will have to enter a shutdown LCO.
- 4. The electronic dose tracking system is currently unavailable.
- 5. This is a NON EMERGENCY situation.
- 6. It is expected that the task will take 30 minutes to complete.
- 7. The dose in the work area is 80 mrem/hr.
- 8. Only operators Joe, Steve, Bob, and Tim are qualified to perform the required tasks.

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## **REVISION: 00**

9. The following is a list of the operators that are available to perform the task and their exposure histories.

Name	ID Number	Annual Non ROG	Annual Mid West Rog	Annual CPS TEDE
		TEDE Dose	TEDE Dose	Dose
Joe	456-09-0022	110 mrem	345 mrem	1527 mrem
Steve	716-53-1129	154 mrem	309 mrem	1625 mrem
Bob	943-39-1589	0 mrem	200 mrem	1780 mrem
Tim	064-88-9935	107 mrem	375 mrem	1519 mrem

10. The Shift Manager directs you to request approval to raise the administrative dose control level per RP-AA-203, Exposure Control and Authorization for an operator so the task may be completed.

## **START TIME:**

JPM NUMBER: SRO A.3.2

**REVISION: 00** 

## 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**

RP-AA-203, Expos 4.2. Authorization 7 Step 1 Standard Comments	<ul> <li>RP-AA-203, Exposure Control and Authorization</li> <li>4.2. Authorization To Raise Administrative Dose Control Levels (ADCLs)</li> <li>Step 1</li> <li>4.2.1, USE Attachment 1, Dose Control Level Extension Form, or a computerized equivalent, to authorize exposures for adult individuals in excess of 2000 mrem routine TEDE in a year.</li> <li>Standard</li> <li>All exposures listed in the table count towards needing an extension</li> <li>Determine that Bob has the lowest exposure</li> </ul>					
Comments						
	SAT UNSAT Comment Number					
4.2.2. A supervisor and submit the requ	from the department requesting approval shall complete Section I of Attachment 1 est to the Radiation Protection Department indicating:					
-The name, identified dose extension is be *Step 2	cation number, and signature of the individual for whom a eing requested. Fills in NAME and SSN for Bob on Section I of Attachment 1 of RP-AA- 203					
Standard	Critical to identify and document Bob as the lowest dose Writes Bob in Name block and 943-39-1589 in SSN block					
CUE When examinee request that Bob sign the form state: Bob has signed the form Comments						
an an an an an tao an tao an	SAT UNSAT Comment Number					

Page 8 of 11

	CLINTON POWER STATION
JPM NUMBER: SRO	A.3.2 <b>REVISION: 00</b>
4.2.2: -Whether or not other q perform the work.	alified individuals with lower dose are available to
*Step 3	Completes line 1 of Section I of Attachment 1 of RP-AA-203
Standard	Checks No and writes in the remarks that this operator has the lowest dose of the operators that are available and qualified to perform this task. (or words to that effect.)
Comments	Marking NO is Critical
	SAT UNSAT Comment Number
4.2.2: -A detailed explanation Step 4	of why the dose extension is necessary. Completes line 2 of Section I of Attachment 1 of RP-AA-203
Standard	Writes to prevent entering a shutdown LCO. (or words to that effect.)
Comments	
	SAT UNSAT Comment Number
4.2.2: -The requested annual T increments, i.e. 2500 m *Step 5	EDE limit for the individual (expressed in 500 mrem em, 3000 mrem, etc.) Complete line 3 of Section I of Attachment 1 of RP-AA-203
Standard	Writes 2500 in the blank provided.
Comments	
	SAT UNSAT Comment Number
*Step 6	Signs and dates the form
Standard	Examinee signs their name and fills in today's date.
Comments	
	SAT UNSAT Comment Number

## CLINTON POWER STATION ADMIN JPM REVISION: 00

## JPM NUMBER: SRO A.3.2

Step 7	Forwards form to RP for approval.
Standard	Examinee states that the form must be routed to RP for approval.
CUE	As RP state that the approval form is being routed.
Comments	n eine en grut en en en en en gegenen verse gestelden. Die eine en en eine eine eine eine eine

SAT UNSAT Comment Number

### **TERMINATING CUES:**

Determine Bob has the lowest exposure and fill out Section I of Attachment 1 of RP-AA-203 and RP is routing the form for approval.

### **STOP TIME:**

### CLINTON POWER STATION ADMIN JPM REVISION: 00

## JPM NUMBER: SRO A.3.2

## INITIATING CUE

- 1. You are the WCS, the Unit is at 50% power.
- 2. An operator is required to support the FIN team during the repair of valve 1FW042A "Rx Feedwater Flow Inst Root" in the Aux Bldg STEAM TUNNEL.
- 3. If the work is not completed this shift the Unit will have to enter a shutdown LCO.
- 4. The electronic dose tracking system is currently unavailable.
- 5. This is a NON EMERGENCY situation.
- 6. It is expected that the task will take 30 minutes to complete.
- 7. The dose in the work area is 80 mrem/hr.
- 8. Only operators Joe, Steve, Bob, and Tim are qualified to perform the required tasks.
- 9. The following is a list of the operators that are available to perform the task and their exposure histories.

Name	ID Number	Annual Non ROG	Annual Mid West Rog	Annual CPS TEDE
		TEDE Dose	TEDE Dose	Dose
Joe	456-09-0022	110 mrem	345 mrem	1527 mrem
Steve	716-53-1129	154 mrem	309 mrem	1625 mrem
Bob	943-39-1589	0 mrem	200 mrem	1780 mrem
Tim	064-88-9935	107 mrem	375 mrem	1519 mrem

10. The Shift Manager directs you to request approval to raise the administrative dose control level per RP-AA-203 "Exposure Control and Authorization" for an operator so the task may be completed.



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### JPM NUMBER: SRO A.4.2

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## JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

na antisense na di sense an	<ol> <li>Task description and number, JPM description identified.</li> </ol>	ription and number are
	2. Knowledge and Abilities (K/A) references	are included.
	<ol> <li>Performance location specified. (in-plant, simulator)</li> </ol>	control room, or
	4. Initial setup conditions are identified.	
	5. Initiating and terminating cues are proper	rly identified.
	6. Task standards identified and verified by	SME review.
	<ol> <li>Critical steps meet the criteria for critical with an asterisk (*).</li> </ol>	steps and are identified
	<ol> <li>Verify the procedure referenced by this J current revision of that procedure: Procedure Rev Date</li> </ol>	PM matches the most
	<ol> <li>Pilot test the JPM:</li> <li>a. verify cues both verbal and visual are</li> <li>b. ensure performance time is accurate.</li> </ol>	free of conflict, and
	10. If the JPM cannot be performed as writte responses, then revise the JPM.	n with proper
	11. When JPM is revalidated, SME or Instruct cover page.	ctor sign and date JPM
	SME/Instructor	Date
	SME/Instructor	Date

in one of

## JPM NUMBER: SRO A.4.2

## **REVISION: 00**

## **Revision Record (Summary)**

This is a new JPM

### JPM NUMBER: SRO A.4.2

### **REVISION: 00**

	Operator's Name: Job Title:
	JPM Title: Transfer Command and Control to TSC JPM Number:SRO A.4.2
	Revision Number:00 Task Number and Title: Ability to take actions called for in the facility emergency plan/including (if required) supporting or acting as emergency coordinator
<b>.</b> .	K/A Number 2.4.38 Importance 4.0
	Suggested Testing Environment: Simulator
	Actual Testing Environment: 🗅 Simulator 🗅 Plant 🗅 Control Room
·	Testing Method: Simulate Alternate Path / Faulted: Q Yes No Perform
	Time Critical: 🖸 Yes 🔳 No
	Estimated Time to Complete: 20 minutes Actual Time Used: minutes
	References:

EP-AA-112, EMERGENCY RESPONSE ORGANIZATION (ERO) / EMERGENCY RESPONSE FACILITY (ERF) ACTIVATION AND OPERATION

. Animata

# CLINTON POWER STATION

PM NUMBER: SRO A.4.2			REVIS	SION <u>: 00</u>
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactorily?	n tert e la Ö	Yes	tatis es.	No
The operator's performance was evaluated against the stand has been determined to be:	indards	containe Unsatisfa	d in this ctory	JPM,
comments:				······
				· · · · · · · · · · · · · · · · · · ·
Evaluator's Name:				
valuator's Signature:		D	Date:	

## JPM NUMBER: SRO A.4.2

### **REVISION: 00**

## 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.

## SIMULATOR SET-UP CONDITIONS:

None

### TASK STANDARDS:

Fill out and perform the turnover of Command and Control to the TSC in accordance with Attachment 1 of EP-AA-112.

### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS: None PROCEDURAL/REFERENCES:

PROCEDURAL/REFERENCES:

EP-AA-112, EMERGENCY RESPONSE ORGANIZATION (ERO) / EMERGENCY RESPONSE FACILITY (ERF) ACTIVATION AND OPERATION

### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

### **INITIAL CONDITIONS AND INITIATING CUE:**

- 1. You are the Shift Manager / Shift Emergency Director.
- 2. CPS is in an emergency situation resulting in a reactor trip and HPCS injection. Conditions have degraded and you declared a Site Emergency under EAL FS1 30 minutes ago, due to water level has been less then -193" and reactor coolant leakage is over 100 GPM in the drywell.
- 3. Traveling screen problems resulted in a trip of Circulating Water and service water pumps.
- 4. The TSC is fully activated and ready in all aspects to assume Command and Control. A rough log has been kept.
- 5. Perform the turnover of Command and Control to the TSC during a Site Emergency.

**START TIME:** 

## CLINTON POWER STATION

ADMIN JPM

## JPM NUMBER: SRO A.4.2

### **REVISION: 00**

## **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 <u>Measure. The sequence of steps is assumed unless denoted in the comments section of the JPM.</u>

### **PERFORMANCE STEPS**

## EP-AA-112, EMERGENCY RESPONSE ORGANIZATION (ERO) / EMERGENCY RESPONSE FACILITY (ERF) ACTIVATION AND OPERATION

Step 4.1.3.3. Command and Control of the event shall be transferred from the Control Room to the TSC (or EOF) utilizing EP-AA-112, Attachment 1, "Command and Control Turnover Briefing Form.

Note Use the KEY to evaluate the information transmitted to the TSC to effect the turnover.
---------------------------------------------------------------------------------------------

*Step 1	Refer to EP-AA-112 Attachment 1		
Standard	Locate EP-AA-112 Attachment 1 and fill out the following information:		
	• Current Classification EAL.		
	• Time.		
	• Unit.		
	<ul> <li>Conditions met to determine this classification.</li> </ul>		
	• Utility Message #		
	• State Message #		
	• Time for both		
	• Latest ENS Time		
	Checks YES in Continuous Communications block		
Note	Information to fill out the turnover form is available from the rough log. No.		
	cues need be given.		
CUE	Provide Examinee with a copy of the Rough Log		
	After locating Attachment 1, provide a copy.		
Comments			
	SAT UNSAT Comment Number		

Page 7 of 11

# JPM NUMBER: SRO A.4.2

REVISION: 00

*Step 2	Perform turnover.
Standard	Determines TSC ready to perform non-delegable functions (Checks YES for each on form):
	• Classify events.
	Determine PARs and make notifications.
	Authorize exposures per EPA-400 limits.
	Authorize use of thyroid blocking agents.
CUE	As communicator in the TSC, answer YES to each of the parts of question #3 on the turnover form.
Comments	
	·
	SAT UNSAT Comment Number
*Step 3	SAT UNSAT Comment Number Determines TSC will perform NARS, ENS, HPN, and environs Teams.
* <b>Step 3</b> Standard	SAT         UNSAT         Comment Number           Determines TSC will perform NARS, ENS, HPN, and environs Teams.           Upon transfer of command and control, determines TSC will perform the
*Step 3 Standard	SAT         UNSAT         Comment Number           Determines TSC will perform NARS, ENS, HPN, and environs Teams.           Upon transfer of command and control, determines TSC will perform the following functions (Checks TSC for each on form):
*Step 3 Standard	SAT       UNSAT       Comment Number         Determines TSC will perform NARS, ENS, HPN, and environs Teams.         Upon transfer of command and control, determines TSC will perform the following functions (Checks TSC for each on form):         • NARS
*Step 3 Standard	SAT       UNSAT       Comment Number         Determines TSC will perform NARS, ENS, HPN, and environs Teams.       Upon transfer of command and control, determines TSC will perform the following functions (Checks TSC for each on form):         • NARS       • ENS
*Step 3 Standard	SAT       UNSAT       Comment Number         Determines TSC will perform NARS, ENS, HPN, and environs Teams.       Upon transfer of command and control, determines TSC will perform the following functions (Checks TSC for each on form):         • NARS       • ENS         • HPN
*Step 3 Standard	SAT       UNSAT       Comment Number         Determines TSC will perform NARS, ENS, HPN, and environs Teams.         Upon transfer of command and control, determines TSC will perform the following functions (Checks TSC for each on form):         • NARS         • NARS         • ENS         • HPN         • Environs Teams.
*Step 3 Standard	SAT       UNSAT       Comment Number         Determines TSC will perform NARS, ENS, HPN, and environs Teams.         Upon transfer of command and control, determines TSC will perform the following functions (Checks TSC for each on form):         • NARS         • NARS         • ENS         • HPN         • Environs Teams.

SAT UNSAT Comment Number

**REVISION: 00** 

## JPM NUMBER: SRO A.4.2

Step 4	Transfers other pertinent information.
Standard	Transfers other pertinent information:
	• ERDS Activated (YES)
	• Assembly (YES)
ನ್ನು ಶ್ರೀಕಾರ ಕಾರ್ಯಾ, ಕರ್ಮಿ, ಕರ್ಮಿನಿಯರು, ಕೆಲ್ಲಾರ್ ಪ್ರಾರಂಭಕರ್ ಸರ್ಕಾರಿಗೆ ಕರ್ನಾರಿಗಳು	Evacuation (YES)
	Release Occurring (NO)
	Rad Concerns (NO)
	• In-plant Teams (YES)
	Offsite Assistance Requested (NO)
UE <u>de la constan</u> te de la constante de la constante La constante de la constante de	As a communicator in the TSC, acknowledge the information transferred from the control room for Section #5 on the form. Do NOT provide answers, only acknowledge what is said

SAT	UNSAT	Comment Number
THE REPORT OF A PARTY	A REAL PROPERTY AND A REAL	ANY ANY ADDRESS OF TAXABLE PARTY AND ADDRESS OF TAXABLE PARTY ADDRESS OF TAXAB

	*Step 5	Determines TSC has Command and Control.	
	Standard	Determines TSC has Command and Control:	
		<ul> <li>Ready to receive Command and Control (Checks TSC and YES).</li> <li>Command and Control transferred (Checks TSC, and logs Time.)</li> <li>Announces transfer to control room team.</li> </ul>	
	CUE	Acknowledges TSC has command and control.	
Comments	Comments	Notification to the MCR of transfer is not critical	
		SAT UNSAT Comment Number	

## **TERMINATING CUES:**

Fill out and perform the turnover of Command and Control to the TSC in accordance with Attachment 1 of EP-AA-112.

### STOP TIME:

### JPM NUMBER: SRO A.4.2

**REVISION: 00** 

## **INITIATING CUE**

- 1. You are the Shift Manager / Shift Emergency Director.
- 2. CPS is in an emergency situation resulting in a reactor trip and HPCS injection. Conditions have degraded and you declared a Site Emergency under EAL FS1 30 minutes ago, due to water level has been less then -193" and reactor coolant leakage is over 100 GPM in the drywell.
- 3. Traveling screen problems resulted in a trip of Circulating Water and service water pumps.
- 4. The TSC is fully activated and ready in all aspects to assume Command and Control. A rough log has been kept.
- 5. Perform the turnover of Command and Control to the TSC during a Site Emergency.

ES-301

Administrative Topics Outline

Form ES-301-1

Facility: Clinton Power Station					
Examination Level (circle one): RO / SRO					

Date of Examination: 7/29/2002 Operating Test Number: ILT0101-3

	Administrative Topic/Subject Description	Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Conduct of Operations Plant Parameter Verification	JPM - Review an Offsite Source Power Verification with Out of Specification Readings. (faulted) K/A 2.1.33 Imp 4.0
	Conduct of Operations Apply Technical Specifications	JPM - Verifying Conditions are met to enter Mode 2 K/A 2.1.12 Imp 4.0
A.2	Equipment Control Surveillance Testing	JPM - Review a completed Control Rod / Position Indication Operability Surveillance and Identify Discrepancies (faulted). K/A 2.2.12 Imp 3.4
A.3	Radiation Control Control of Radiation Releases	JPM - Determine High Radiation in HVAC Stack and direct Mechanical Vacuum Pump Secured K/A 2.3.11 Imp 3.2
A.4	Emergency Plan Determine Protective Action Recommendations	JPM - Determine the PAR of evacuate 5 mile radius & 10 miles downwind K/A 2.4.44 Imp 4.0

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NUREG-1021, Revision 8, Supplement 1

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CLINTON POWER STATION
SYSTEM JPM

# JPM NUMBER: SRO A.1.a.3

**REVISION: 00** 

# JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

	NOTE:	All step to JPM	os of this checklist should be perfo usage, revalidate JPM using step	ormed upon initial validation. Prior os 8 through 11 below.			
antes Calendo - Marcia Antesegas, antes Atoma antes a constantes da constantes		an e standarden Maria					
		1.	Task description and number, JF identified.	PM description and number are			
		2.	Knowledge and Abilities (K/A) re-	ferences are included.			
		3.	Performance location specified. ( simulator)	(in-plant, control room, or			
		4.	Initial setup conditions are identif	fied.			
		5.	Initiating and terminating cues ar	e properly identified.			
		6.	Task standards identified and ve	rified by SME review.			
		7.	Critical steps meet the criteria for with an asterisk (*).	r critical steps and are identified			
	· · · · · · · · · · · · · · · · · · ·	8.	Verify the procedure referenced current revision of that procedure Procedure Rev Date	by this JPM matches the most e:			
		9.	Pilot test the JPM: a. verify cues both verbal and vis b. ensure performance time is ac	sual are free of conflict, and scurate.			
		10. If the JPM cannot be performed as written with proper responses, then revise the JPM.					
		11	When JPM is revalidated, SME c cover page.	or Instructor sign and date JPM			
angle gan bina ana ang ang ang ang ang ang ang ang a							
		SM	E/Instructor	Date			
na Santara (Santara) (Santara (Santara)) Santara (Santara) (Santara) (Santara)		SM	E/Instructor	Date			
			<u> </u>				
		SM	E/Instructor	Date			

# JPM NUMBER: SRO A.1.a.3

# **REVISION: 00**

**Revision Record (Summary)** 

1. **Revision 00,** This is a new JPM.

\_\_\_\_\_

# JPM NUMBER: SRO A.1.a.3

e<sup>3</sup>

# **REVISION: 00**

	Operator's Name:
	Job Title: SRO
	JPM Title: Review an Offsite Source Power Verification, With Out of Specification
	Readings
	JPM Number: SRO A.1.a.3
	Revision Number: 00
	Task Number and Title: 9082.01, Complete Control Room actions to perform the OFFSITE
	SOURCE POWER VERIFICATION
	K/A Number 2.1.33 Importance SRO 4.0
Construction of the second	
	Suggested Testing Environment: Any
	Actual Testing Environment: 🛛 Simulator 🖵 Plant 🖵 Control Room
	Testing Method: Simulate Alternate Path / Faulted: Ves No
	Perform
	Time Critical: 🔟 Yes 🔳 No
	Estimated Time to Complete 20 minutes Act 170' II 1
	Estimated lime to Complete: 20 minutes Actual lime Used: minutes
	Deferrences CDC 002 01 OFFRITE COLDAE DOWED VEDIELATION D
	References: CPS 9082.01, OFFSITE SOURCE POWER VERIFICATION, REVISION 36d
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	en e
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ener en 7 tore reactive.	
ana ang ang ang ang ang ang ang ang ang	n a managan wana kuluku ya na kana kana kana na kuluku uu ya na kana kuluku uu na kana kana kuluku na kana kana A

	JPM NUMBER: <u>SRO A.1.a.3</u> EVALUATION SUMMARY: Were all the Critical Elements performed satisfactorily?	D	Yes		<b>SION:<u>00</u></b> No	
	The operator's performance was evaluated against the sta has been determined to be:	undards Di U	containe Insatisfa	ed in th actory	is JPM, and	1
	-Comments:					
	•	······	····			
	Evaluator's Name:					
	Evaluator's Signature:	Date				
antin bar yar shina antini .		ing a star and a star	en en anderen de	and a state of the	n overer en	ada a sanan ara-ara-
				•		
					Page 5 o	f9

### JPM NUMBER: SRO A.1.a.3

**REVISION: 00** 

# 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.

#### SIMULATOR SET-UP CONDITIONS:

N/A

# TASK STANDARDS:

The completed Offsite Source Power Verification has been reviewed the out of specification parameters have been identified and LCO actions identified.

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

None

#### **PROCEDURAL/REFERENCES:**

CPS 9082.01, OFFSITE SOURCE POWER VERIFICATION, Revision 36d

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

Present the completed copy of CPS 9082.01, Offsite Source Power Verification, to the examinee when the Initiating Cue is presented.

### **INITIAL CONDITIONS AND INITIATING CUE:**

The plant is operating at full power.

The Normal Frequency (7-day) performance of CPS 9082.01, Offsite Source Power Verification, has been completed.

Review the completed CPS 9082.01, Offsite Source Power Verification, for approval.

#### **START TIME:**

Page 6 of 9

#### JPM NUMBER: SRO A.1.a.3

**REVISION: 00** 

### **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.

Steps and sections may be performed in any order, independently and concurrently as desired to fulfill the surveillance criteria.

### **PERFORMANCE STEPS**

	1.	Review of completed CPS 9082.01, Offsite Source Power Verification.
	Standard	Examinee begins review of completed 9082.01.
	CUE Comments	
-		SAT UNSAT Comment Number
	*2.	345 kV voltage low.
	Standard	Identifies voltage reading that is below the minimum acceptable level.
	CUE	• To respond to student's inquiry for verification of the low voltage, respond by stating that all Voltage values for the 345 KV demonstrates a low out of specification value.
	Comments	• Take the reported status and ask what would you do about it?
		SAT UNSAT Comment Number
	*3.	Technical Specification LCO.
	Standard	<ul> <li>Enters ITS LCO 3.8.1, Condition:</li> <li>A.1 SR 3.8.1.1 within one hour</li> <li>A.2 restore Offsite source within 72 hours</li> </ul>
	CUE	
alla ang ang ang ang ang ang ang ang ang an	Comments	
-		SAT UNSAT Comment Number

# JPM NUMBER: SRO A.1.a.3

# **REVISION:** <u>00</u>

territor and	4.	Compositivo o	ationa					
	Standard	<ul> <li>Corrective actions</li> <li>Would take actions to raise voltage such as raise generator voltage, contact System supervisor.</li> <li>Initiates a Condition Report documenting failure of surveillance,</li> <li>Addresses performers failure to identify out-of-specification voltage level.</li> </ul>						
	CUE Acknowledge possible corrective actions: System supervisor to adjust voltage RO to adjust Voltage NLO to verify SVC operation Station Duty Manager engineering assistance on SVC/RAT/SY issues WCS will initiate condition report							
	Comments							
		SAT UN	ISAT Comment N	lumber		,·, ·. · · · · · · · · · · · · · · · · · ·	-	
	TERMINATING C	UES:	·					
	Out of specific ITS LCO has b	ation data has bee been entered.	en identified.					
	STOP TIME:	n an		an ang nangka nganang pung	ale og til elstade fre funderer er er er er		an Warth i Arys	
		<u>K/</u>	A REFERENCE N	UMBERS				
					Importanc	e Rating		
and a strategies of the state	K/A SYSTEM NUI Generic	MBER	<b>K/A</b> 2.1.3	NUMBER 3	<b>RO</b> 3.4	<b><u>SRO</u></b> 4.0	<u></u>	
· · · · · · · · · · · · · · · · · · ·	an a							
			······					

# JPM NUMBER: SRO A.1.a.3

# INITIATING CUE

The plant is operating at full power.

The Normal Frequency (7-day) performance of CPS 9082.01, Offsite Source Power Verification, has been completed.

Review the completed CPS 9082.01, Offsite Source Power Verification, for approval.

Lastpage

# REVISION: <u>00</u>

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# JPM NUMBER: SRO A.1.b.3

**REVISION:** <u>00</u>

# JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

<b>NOTE:</b> All steps of this checklist should be performed upon in to JPM usage, revalidate JPM using steps 8 through 1	nitial validation. Prior
1. Task description and number, JPM description identified.	n and number are
2. Knowledge and Abilities (K/A) references are	included.
3. Performance location specified. (in-plant, cont simulator)	rol room, or
4. Initial setup conditions are identified.	
5. Initiating and terminating cues are properly ide	entified.
6. Task standards identified and verified by SME	review.
7. Critical steps meet the criteria for critical steps with an asterisk (*).	and are identified
8. Verify the procedure referenced by this JPM n current revision of that procedure:	natches the most
9. Pilot test the JPM: a. verify cues both verbal and visual are free c	of conflict, and
b. ensure performance time is accurate. 10. If the JPM cannot be performed as written with	h proper
responses, then revise the JPM.	
11. When JPM is revalidated, SME or Instructor s cover page.	ign and date JPM
SWIE/Instructor	Date
SME/Instructor	Date
SME/Instructor	Date
	Page 2 of 10

# JPM NUMBER: SRO A.1.b.3

# REVISION: 00

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM.

# JPM NUMBER: SRO A.1.b.3

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Summers ...

# **REVISION: 00**

	Operator's Name: Job Title: SRO	
	JPM Title: Verifying Conditions are met to enter Mode 2 JPM Number: SRO A.1.a.3 Revision Number: <u>00</u> Task Number and Title: Verifying Conditions are met to enter Mode 2	-
· 경찰은 손님은 이미지 가지가 있다.	K/A Number 2.1.12 Importance SRO 4.0	
	Suggested Testing Environment: Any	
	Actual Testing Environment: 🗅 Simulator 🗅 Plant 🗅 Control Room	
ż	<b>Testing Method:</b> □ Simulate <b>Alternate Path / Faulted:</b> □ Yes ■ No ■ Perform	
	Time Critical: 🗅 Yes 📕 No	
	Estimated Time to Complete: 25 minutes Actual Time Used: minutes	
	References: CPS 3001.01, Approach to Critical CPS 3001.01C001, Preparation For Startup Checklist	
	CPS 3001.01C002, Mode 2 Checklist	
ซีซีซีอออ่างระวังคร.ก. ระการออ่างสาวาร	CPS 3001.01C002, Mode 2 Checklist	
<u>ขับวิ</u> รณ์อาการกำรางการการกำราง	CPS 3001.01C002, Mode 2 Checklist	
	CPS 3001.01C002, Mode 2 Checklist	
	CPS 3001.01C002, Mode 2 Checklist	
	CPS 3001.01C002, Mode 2 Checklist	
	CPS 3001.01C002, Mode 2 Checklist	
	CPS 3001.01C002, Mode 2 Checklist	

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	SI MINUMBER. SK	0 A.1.0.5				INE V I	51010.00	
	EVALUATION SUN Were all the Critical I	MMARY: Elements p	erformed satisfactoril	y? 🗖	Yes		No	
- fan ier oan er sidaan en aft bier benen	The operator's perform	mance was	evaluated against the Satisfactory	standards	containe	ed in th	is JPM, and	ſ
	nas been determined t	.0 00.	G Satisfactory	-	Onsatista	icitor y		
	Comments:		· · · · · · · · · · · · · · · · · · ·					
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di su su recentario	Evaluator's Name:						•	
	Evaluator's Signature	: :		Dat	e:			
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### JPM NUMBER: SRO A.1.b.3

**REVISION:** <u>00</u>

# 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.

# SIMULATOR SET-UP CONDITIONS:

N/A

# TASK STANDARDS:

Directs Entering Mode 2 by Placing the Mode Switch to Startup/Standby.

# TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

#### **PROCEDURAL/REFERENCES:**

CPS 3001.01, Approach to Critical CPS 3001.01C001, Preparation For Startup Checklist CPS 3001.01C002, Mode 2 Checklist

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

Present the completed copy of CPS 3001.01, CPS 3001.01C001, CPS 3001.01C002, to the examinee when the Initiating Cue is presented.

# INITIAL CONDITIONS AND INITIATING CUE:

You have taken the shift as the CRS in Mode 4 with conditions established to startup. Review the procedures CPS 3001.01, Approach to Critical, CPS 3001.01C001, Preparation For Startup Checklist, CPS 3001.01C002, Mode 2 Checklist and identify any actions required for startup, then place the plant into Mode 2.

#### **START TIME:**

JPM NUMBER: SRO A.1.b.3

## **REVISION: 00**

## **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.

Steps and sections may be performed in any order, independently and concurrently as desired to fulfill the surveillance criteria.

#### PERFORMANCE STEPS

	<ol> <li>Reviews:</li> <li>1) CPS 3001.01, Approach to Critical</li> <li>2) CPS 3001.01C001, Preparation For Startup Checklist</li> <li>3) CPS 3001.01C002, Mode 2 Checklist</li> </ol>
Standard	Examinee begins review of completed: CPS 3001.01, Approach to Critical CPS 3001.01C001, Preparation For Startup Checklist CPS 3001.01C002, Mode 2 Checklist
CUE Comments	<ul> <li>Problems in the checklist:</li> <li>SRM D inoperable, Only Three required for LCO 3.3.1.2 and ORM 2.2.2</li> <li>FPM Particulate monitor Inoperable LCO 3.4.7 satisfied by the Gaseous monitor being operable</li> </ul>
	<u>RCIC Inoperable not required to be Operable until 150 PSIG</u>
	satisfy LCOs 3.5.1 and 3.6.1.7
	• RHR B Test Prep Switch in TEST, ORM 2.5.2 NOT satisfied
	SAT UNSAT Comment Number

Page 7 of 10

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# JPM NUMBER: SRO A.1.b.3

*8.1.7	Does NOT Enter Mode 2 by Placing the Mode Switch to				
	Startup/Standby				
Standard	Does NOT direct Placing the Mode Switch into Startup/Standby.				
	Identifies following LCO/ORM conditions are not met:				
	LOC 3.5.1 ECCS and				
	LCO 3.6.1.7, Containment spray LCOs and				
	ORM 2.5.2, MOV Thermal Overload Protection				
CUE	When the student point out problems ask what they would do about them.				
	Once RHR B is recognized it is not in Standby state 1 hour has passed and				
	RHR B is in Standby.				
	When RHR B Test Prep Switch in TEST is recognized to be in TEST state				
	the switch is placed in NORMAL.				
Comments	SAT UNSAT Comment Number				
*8.1.7	Directs Entering Mode 2 by Placing the Mode Switch to Startup/Standby				
Standard	Directs Entering Mode 2 by Placing the Mode Switch to Startup/Standby				
CUE	Reports Mode Switch is in Startup/Standby				
Comments					
	SAT UNSAT Comment Number				
TERMINATIN	G CUES:				
Dinasta Enterin-	Made 2 by Dissing the Made Switch to Startyn Standhy				

Directs Entering Mode 2 by Placing the Mode Switch to Startup/Standby

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

# JPM NUMBER: SRO A.1.b.3

**REVISION: 00** 

# **K/A REFERENCE NUMBERS**

# Importance Rating

K/A SYSTEM NUMBER	K/A NUMBER	RO	SRO
Ability to apply TS for a system	2.1.12	2.8	4.0
Ability to perform specific system and Integrated	2.1.23	3.9	4.0
plant procedures during different modes of plant			
operation			

JPM NUMBER: SRO A.1.b.3

# **INITIATING CUE**

You have taken the shift as the CRS in Mode 4 with conditions established to startup. Review the procedures CPS 3001.01, Approach to Critical, CPS 3001.01C001, Preparation For Startup Checklist, CPS 3001.01C002, Mode 2 Checklist and identify any actions required for startup, then place the plant into Mode 2.

CPS 3001.01C002

# MODE 2 CHECKLIST

### SCOPE OF REVISION:

- Incorporated Specific Rev. 14a rev marks not retained.
- <u>C1R08</u>:
  - 1) Incorporated EC 332064 ORM OR 2.2.16 changed from CRVICs to MSLRM.
- Rev 15a Editorial revision to step 6 to clarify the documentation requirements of LS-AA-105.



ORIGINATOR: Thomas J. Landin

SQR: Jim Bunning

CLASS CODE: SNND1

APPROVAL DATE: MAR 12 2002

CURRENT CHANGES TO GENERAL REVISION List of Affected Pages Date Change # 05/02/02 1 2 0 15a 0 € 0 6 1 of 9 Page Rev. 15a

#### MODE 2 CHECKLIST (cont'd)

### NOTE

CPS

3001.01C002

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Page

Initial

IAW ITS LCO 3.0.4/ORM OR 1.2.4, when an ITS LCO/ORM OR is not met, entry into a MODE or other specified condition in the Applicability shall not be made except when the associated ACTIONS to be entered permit continued operation in the MODE or other specified condition in the Applicability for an unlimited period of time.

Exceptions to this are stated in the individual Specifications.

The following systems are required to be operable for entry into MODE 2. Demonstrate system operability by verifying that there are no outstanding items which affect system operability or invalidate previous surveillances, and that all attendant instrumentation and support systems are operable. (Place initials after each system operability declaration).

#### ITS LIMITING CONDITIONS FOR OPERATIONS (LCO's)

3.1.1	The Shutdown Margin requirements are satisfied	Here and the second sec
3.1.3	Each Control Rod is operable IAW ITS LCO 3.1.3.	30
3.1.4	The Control Rod Scram Times are met IAW ITS LCO 3.1.4. $/$	36
3.1.5	The Control Rod Scram Accumulators are operable IAW ITS LCO 3.1.5.	36
3.1.7	The Standby Liquid Control System is operable IAW ITS LCO 3.1.7.	<u>H</u>
3.1.8	The Scram Discharge Volume Vent and Drain Valves are operable IAW ITS LCO 3.1.8.	<u>SH</u>
3.3.1.1	The Reactor Protection System Instrumentation is operable IAW ITS LCO 3.3.1.1.	<u>Da</u>
3.3.1.2	2 The Source Range Monitor Instrumentation is operable IAW ITS LCO 3.3.1.2.	24
3.3.2.1	The Control Rod Block Instrumentation is operable IAW ITS LCO 3.3.2.1.	H -
3.3.3.1	The Post Accident Monitoring Instrumentation is operable IAW ITS LCO 3.3.3.1.	31
3.3.3.2	2 The Remote Shutdown System is operable IAW ITS LCO 3.3.3.2.	DH

8.

MODE 2 CHECKLIST (cont'd)

3001.01C002

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Note

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CPS

ITS LIMITING CONDITIONS FOR OPERATIONS (LCO's) (cont'd)

- 3.5.1 The Emergency Core Cooling Systems are operable IAW ITS LCO 3.5.1.
- 3.5.3 The Reactor Core Isolation Cooling System is operable IAW ITS LCO 3.5.3.
- 3.6.1.1 Primary Containment is operable IAW ITS LCO 3.6.1.1.
- 3.6.1.2 The Primary Containment Air Locks are operable IAW ITS LCO 3.6.1.2.
- 3.6.1.3 The Primary Containment Isolation Valves are operable IAW ITS LCO 3.6.1.3, including verification that valves 1VR002A & B and 1VQ006A & B are sealed closed per ORM Attachment 4, NOTE g (refer to CPS 9064.03).

3.6.1.6 The Low-Low Set Valves are operable IAW ITS LCO 3.6.1.6.

- 3.6.1.7 The RHR Containment Spray System is operable IAW ITS LCO 3.6.1.7.
- 3.6.1.8 The Main Steam Isolation Valve Leakage Control System is operable IAW ITS LCO 3.6.1.8.
- 3.6.1.9 The Feedwater Leakage Control System (FWLCS) is operable IAW ITS LCO 3.6.1.9.
- 3.6.2.3 The RHR Suppression Pool Cooling Subsystem is operable IAW ITS LCO 3.6.2.3.
- 3.6.2.4 The Suppression Pool Makeup System is operable IAW ITS LCO 3.6.2.4.
- 3.6.3.1 The Primary Containment Hydrogen Recombiners are operable IAW ITS LCO 3.6.3.1.
- 3.6.3.2 The Primary Containment and Drywell Hydrogen Igniters are operable IAW ITS LCO 3.6.3.2.
- 3.6.3.3 The Containment/Drywell Hydrogen Mixing systems are operable IAW ITS LCO 3.6.3.3.
- 3.6.4.1 The Secondary Containment is operable IAW ITS LCO 3.6.4.1.
- 3.6.4.2 The Secondary Containment Isolation Dampers are operable IAW ITS LCO 3.6.4.2
- 3.6.4.3 The Standby Gas Treatment System is operable IAW ITS LCO 3.6.4.3.

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15a 👘

**MODE 2 CHECKLIST** (cont'd)

CPS

3001.01C002

## ORM OPERATIONAL REQUIREMENTS (OR's) Initial The Control Rod Housing is in place 2.1.1 IAW ORM OR 2.1.1. The Control Rod Scram Accumulators 2.1.2 are operable IAW ORM OR 2.1.2. The Average Power Range Monitors - Control Rod Block 2.2.1 Instrumentation is operable IAW ORM OR 2.2.1. The Source Range Monitors - Control Rod Block 2.2.2 Instrumentation is operable IAW ORM OR 2.2.2. 2.2.3 The Intermediate Range Monitors - Control Rod Block Instrumentation is operable IAW ORM OR 2.2.3. The Scram Discharge Volume - Control Rod Block 2.2.4 Instrumentation is operable IAW ORM OR 2.2.4. The ADS Accumulator Low Pressure Alarm System 2.2.13 Instrumentation is operable IAW ORM OR 2.2.13. The NSPS Self Test System is operable IAW ORM OR 2.2.14. 2.2.14 The Suppression Pool Monitoring Instrumentation 2.2.15 is operable IAW ORM OR 2.2.15. The Main Steam Line Radiation Monitoring (MSLRM) 02.2.16 Instrumentation is operable IAW ORM OR 2.2.16. 0 All Snubbers are operable IAW ORM OR 2.4.1. 2.4.1 All Drywell Post-LOCA vacuum relief valves position 2.4.6 indicators are operable IAW ORM OR 2.4.6. The MSIV-LC system is operable IAW ORM OR 2.4.7. 2.4.7 2.5.1 The Containment Penetration Conductor Overcurrent Protective Devices are operable IAW ORM OR 2.5.1. The Motor Operated Valves Thermal Overload 2.5.2 Protection Devices are operable IAW ORM OR 2.5.2. All surveillances that are listed in Table 1 are complete. XXXXX Time Completed: Date \_\_\_\_

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Page

of

CPS 3001.01C002 MODE 2 CHECKLIST (cont'd) COMMENTS/DISCREPANCIES Note 1 SRM'S A, B+Cave the 3 required SDM's FersTARTUP, SRM D is INPP Novez Fission Indust Monter particulate detector failed ARXYZ. Nor required for 1003.4.7 STANDBY also CUS m Sqiay Note 3 RHR B is in SID cooling Notey RCR outot sorvin for and change on the turbin NOTES RHB Test Proposited in Test to support 310 conting volve operation Performed by: (Initials) Print Name) Performed by: (Initials) (Print Name) (Date) Performed by: (Initials) (Print Name) (Date) Performed by: (Print Name) (Initials) (Date) Performed by: (Print Name) (Initials) (Date) Time XX:XX Completed: Date REVIEW AND APPROVAL Title Shift Management Surveillance Coordinator

Rev. 15a

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NRC SUBMITTAL COPY

JPM NUMBER: SRO A.2.3

**REVISION: 01** 

# 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 through 11 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, or simulator)
- 4. Initial setup conditions are identified.
- 5. Initiating and terminating cues 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 (\*).
    - Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. Date
  - Pilot test the JPM:
     a. verify cues both verbal and visual are free of conflict, and
     b. ensure performance time is accurate.
  - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
  - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

 SME/Instructor
 Date

 SME/Instructor
 Date

 SME/Instructor
 Date

		reconstruction of the contract	R STATION	TION		
*	JPM NUMBER:	<u>SRO A.2.3</u>	SYSTEM J	PM	REVISI	<b>DN: 01</b>
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	<b>Revision Record</b>	(Summary)				
	1. <b>Revision 00,</b>	This is a new SR	O Administrative	e JPM		
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					Pag	e 3 of 24

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	MBER: SRO A	A.2.3 REVISION: 01
Operator's Na		
Tob Title		
jou mie.	SKO	
JPM Title:	Review a Complet Identify Discrepan	eted Control Rod / Position Indication Operability Surveillance and ncies (Faulted)
JPM Number:	SRO A.2.3	
Revision Num	nber: 00	2010530 Varify Control Rod/Regition Indigation Operability
Task Inullidel		concessor, verify control Rod/Position Indication Operability
K/A Number:	2.2.12	Importance: 3.4
Suggested Te	sting Environmen	it: Any
Actual Testin	g Environment:	Simulator D Plant Control Room
<b>Testing Meth</b>	od: 🗅 Simulate	Alternate Path / Faulted: 📕 Yes 🖵 No
	Perform	
Time Critical	l: 🗅 Yes	No
Estimated Ti	me to Complete:	17 minutes Actual Time Used: minutes
Keterences:	CPS No. 9011.01, Revision 27c	, CONTROL ROD/POSITION INDICATION OPERABILITY,

h.....

CLINTON PC SYST	WER STATION EM JPM
JPM NUMBER: SRO A.2.3	REVISION: 01
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements performed satisfactor	rily? 🗅 Yes 🗅 No
The operator's performance was evaluated against determined to be:  Satisfactory U	the standards contained in this JPM, and has been usatisfactory
Comments:	
Evaluator's Name:	n an
Evaluator's Signature:	Date:
	Page 5 of 24

JPM NUMBER: SRO A.2.3

### **REVISION: 01**

# 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.

#### SIMULATOR SET-UP CONDITIONS:

Not Applicable

## TASK STANDARDS:

Review of CPS 9011.01 Control Rod / Position Indication Operability surveillance has been completed.

Misaligned control rod has been identified.

Final Conditions of CPS 9011.01 not met has been determined.

### TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

Marked up copy of CPS 9011.01, signing off all steps as satisfactory (procedure attached). Copy of an OD-7 Option 2, OD-7 Option 4 and an Official 3D Case.

#### **PROCEDURAL/REFERENCES:**

CPS 9011.01, CONTROL ROD/POSITION INDICATION OPERABILITY, Revision 27c CPS 1011.02, IMPLEMENTATION AND CONTROL OF SURVEILLANCE TESTING, Revision 20

#### **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps. Provide CPS 9011.01, initial OD-7 and surveillance after reading the initiating cue.

#### **INITIAL CONDITIONS: 100% Power**

#### **INITIATING CUE:**

The plant is operating at 100% power. The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability for the weekly surveillance. You are to review the completed surveillance for approval. Report when the task is complete.

### **START TIME:**

JPM NUMBER: SRO A.2.3

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**REVISION: 01** 

### **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**

1. Standard CUE	Review completed CPS 9011.01 Examinee begins review of 9011.01.
Comments	
· · · · · · · · · · · · · · · · · · ·	SAT UNSAT Comment Number
*2.	Review the initial and final Control Rod Position printouts to verify proper rod positions
Standard	Examinee performs review and identifies that rod 36-29 is at position 6 instead of position 4.
Comments	SAT UNSAT Comment Number
3. Standard CUE	Notify the SM that rod 36-29 is at position 6 instead of position 4. Final conditions requirement is determined NOT met, Shift Manager is notified of discrepancy. Acknowledge notification of mis-positioned control rod.
Comments	
	SAT UNSAT Comment Number
<b>Terminating Cue:</b> Review of 9011.01 has Shift Manager has bee	s been completed and the discrepancy identified. n notified of mis-positioned control rod.
STOP TIME:	· · · · · · · · · · · · · · · · · · ·
1994 - Antonio Antonio de Carto de Cart	Page 7 of 24

JPM NUMBER: SRO A.2.3

**REVISION: 01** 

# K/A REFERENCE NUMBERS

K/A SYSTEM NUMBER	K/A NUMBER	Importance <u>RO</u>	e Rating <u>SRO</u>
GENERIC	2.2.12	3.0	3.4

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# **CLINTON POWER STATION**

SYSTEM JPM

JPM NUMBER SRO A.2.3

**REVISION:** 01

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### **INITIATING CUE**

The plant is operating at 100% power. The A RO has completed CPS 9011.01 Control Rod/Position Indication Operability for the weekly surveillance. You are to review the completed surveillance for approval. Report when the task is complete.

<b>e</b> 100		CPS _1011.02F001_
4. Tar		RCCL:
		SURV FILE:
		COMPLETION DATE:
		For Surveillance Coordinator Use Only
I.	SURVEILLANCE TEST F	PACKAGE COVER SHEET
2	Procedure No.: 9011.01	CONTROL ROD/POSITION INDICATION
		EIN, Channel, Loop, Division, etc.
h <b>Y post</b> alatina "de nos for A <sup>n</sup> anos e la és - la consta oran dessa de la dessa de la dessa de la dessa de la de		(Check appropriate box)
	ROUTINE Test:	[ 🗸 ]
	FREQUENT Surveillance (More freq Seven days):	uent than
	CONTINGENT Test: a) Triggered by event or proced Describe:	lural trigger: [ ]
	b) Post Maintenance Test (PMT):	[ ] AR/PM No
$\smile$ II.	TEST RESULTS	i ne na seconda de la construcción de la construcción de la construcción de la construcción de la construcción La construcción de la construcción d
	a) Operability Requirements: (Section 9.1, as <u>specific to</u>	the test attempted)
u na sina di sua su na su na su na su	[✔] Fully Acceptable [ ] Partially Acceptab	[ ] Not Applicable ole [ ] Fully Unacceptable
	b) Other Requirements: (Section 9.2, as specific to	the test attempted)
	[ ] Fully Acceptable [ ] Partially Acceptab	[✓] Not Applicable ole [] Fully Unacceptable
	Comments:	
III.	REVIEW AND APPROVAL	
	Immediate Supervisor of Test Per	former /
	na des l'adaité de la constant a la constant de la La constant de la cons	Signature Date
		Test Package Total Pages
Rev.	<u>10b</u>	Page <u>1 of 3</u>

Performe	d by:	Dick Long (Print Name)	DL (Init)	Performed	by: (Print Name)	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by:(Print Name)	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by: (Print Name)	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by:(Print Name)	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by: (Print Name)	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by:(Print Name)	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by:	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by:	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by: (Print Name)	(Init)
Performe	d by:	(Print Name)	(Init)	Performed	by: (Print Name)	(Init)
"AS F (Circ	Elect OUND" le as	rical, C&I Use Only: data out-of toleran applicable):	.ce	αν <sub>η μ</sub> ετική το	Surv. Coord.: User Field A, item 6 (T, N, or B)	
a) T b) N c) C	ech S on-T. AT <b>`</b> A	pec data: YES S data: YES Y YES	NO NA NO NA NO NA			
2 Note:	If ir	CAT 'A' per CPS No. Nitiate 1401.09F002	1401.09, «CM-14»	App.E,		

Rev. <u>10b</u>

# Job Performance Measure (JPM)

	PAGE	1, FINAL	I							
				CLINTO	N CYCLE 6	SEQUE	NCE NO 23			
	CORE P	ARAMETERS		3D MON	IICORE	toda	у-2ххх хх:	XX CALCULATED		
	POWER	MWT	2890	. PERIOI	IC LOG	toda	y-2xxx xx:	XX PRINTED		
	POWER	MWE	967			CASE	ID FMLD195	50708205855		
	F.TOM	MLB/HR	75.84	4 CALC RE	SOLTS	RESTA	RT FMLD195	0708195845		
	EPAPDR CUDC	ם ז/ וווחים	0.82	4 9 Voff	1 00	LPRM	SHAPE - FU	JEL CORE		
	PR	DIU/LD PSTa	1027	9 XE WORT	1.00 1.00 יו אי	סטע תב∩ד י	T.TNE SIIMMA	VDV		
	CORE	MWD/sT	20850	8 XE/RATE	1.00	) CORE	POWER	00 08		
t	CYCLE	MWD/sT	8741.	6		CORE	FLOW	89.8%		
	MCPR	un an	1.26	8	an sen na manananan	LOAD	LINE	107.2%		· ·-
	CORREC'	TION FACT	OR: MFL	CPR= 1.000	MFLPD= 1.	000 MAPR	AT= 0.999			
1	OPTION	: ARTS	DUA	L LOOP	MANUAL FL	LOW MCPR	LIM = 1.240	)		
	METOD	TOC	MELDD	LIMITING LC	CATIONS (N	ION-SYMMET	RIC)	TOC		
	A 978	37-28	MELED 0 912	17-22-18	0 821	7-28- 5	0 798	A1-28-16		
	0.976	39-26	0.912	7-28- 5	0.821	15-30-16	0.798	19-28-16		
	0.975	41-28	0.912	41-28-16	0.017	11-22-13	0.790	7-28- 5		
	0.973	11-28	0.902	19-28-16	0.816	19-26-16	0.791	39-22-20		
	0.940	13-32	0.896	15-38-18	0.813	19-30-15	0.782	9-22-13		
	0.939	9-26	0.895	21-26-16	0.803	7-26-12	0.779	11-20-13		
	0.937	11-20	0.893	17-26-16	0.802	9-36-13	0.779	17-26-16		
	0.930	39-22	0.889	9-22-13	0.798	11-30-11	0.777	11-28-15		
dana di 1	0.927	7-28	0.889	11-20-13	0.796	9-26- 5	0.776	13-32-16		
	0.923	9-22	0.888	13-32-16	0.795	39-22-20	0.774	47-26-12		
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	53				APRAT P=PCR	AT *=MULT	NOTCH 00	I REL PW         LOC           0.238         25           0.446         24	na	
	53 49				APRAT P=PCR	AT *=MULT	NOTCH 00 02 04	I REL PW         LOC           0.238         25           0.446         24           0.804         23	19	
	53 49 L 45				APRAT P=PCR	AT *=MULT	00 02 04 06	I REL PW         LOC           0.238         25           0.446         24           0.804         23           0.963         22	na	 
	53 49 L 45				IPKAT P=PCR	AT *=MULT	NOTCH 00 02 04 06 08	I REL PW         LOC           0.238         25           0.446         24           0.804         23           0.963         22           1.056         21	na	<u></u>
	53 49 1 45 41			P	IFRAT P=PCR	AT *=MULT	NOTCH 00 02 04 06 08 10	I REL PW         LOC           0.238         25           0.446         24           0.804         23           0.963         22           1.056         21           1.158         20	12	
	53 49 45 41 L			P	IFRAT P=PCR	₹AT ×=MULT	NOTCH 00 02 04 06 08 10 12	H         REL         PW         LOC           0.238         25         0.446         24           0.804         23         0.963         22           1.056         21         1.158         20           1.191         19	19	<u></u>
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	53 49 45 41 1 37		18	P C4	18	¦AT ×=MULΤ	NOTCH 00 02 04 06 08 10 12 14 16	H         REL         PW         LOC           0.238         25         0.446         24           0.804         23         0.963         22           1.056         21         1.158         20           1.191         19         1.163         18           1.182         17	19	
	53 49 45 41 1 37 33		18	P C4	18	¦AT ×=MULΤ	NOTCH NOTCH 00 02 04 06 08 10 12 14 16 18	H         REL         PW         LOC           0.238         25         0.446         24           0.804         23         0.963         22           1.056         21         1.158         20           1.191         19         1.163         18           1.182         17         1.220         16		 
	53 49 45 41 1 37 33 1		18	P C4	18	₹AT ×=MULT	NOTCH NOTCH 00 02 04 06 08 10 12 14 14 16 18 20	H         REL         PW         LOC           0.238         25         0.446         24           0.804         23         0.963         22           1.056         21         1.158         20           1.191         19         1.163         18           1.182         17         1.220         16           1.215         15         15		
	53 49 45 41 1 37 33 29		18	P C4	18 6	¦AT ×=MULΤ	NOTCH NOTCH 00 02 04 06 08 10 12 14 16 18 20 22 22	H       REL       PW       LOC         0.238       25         0.446       24         0.804       23         0.963       22         1.056       21         1.158       20         1.191       19         1.163       18         1.182       17         1.220       16         1.215       15         1.187       14		
	53 49 45 41 1 37 33 29 25		18 4	P C4	18 6		NOTCH 00 02 04 06 08 10 12 14 16 18 20 22 24 24	H         REL         PW         LOC           0.238         25         0.446         24           0.804         23         0.963         22           1.056         21         1.158         20           1.191         19         1.163         18           1.182         17         1.220         16           1.215         15         1.187         14           1.212         13         1007         100		
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	53 49 1 45 41 1 37 33 29 25 1		18 4	P C4	18 6	¦AT ×=MULΤ	NOTCH NOTCH 00 02 04 06 08 10 12 14 16 18 20 22 24 24 26 28 30	H       REL       PW       LOC         0.238       25         0.446       24         0.804       23         0.963       22         1.056       21         1.158       20         1.191       19         1.163       18         1.182       17         1.220       16         1.215       15         1.187       14         1.212       13         1.207       12         1.181       11		
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PAGE 2

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CLINTON CYCLE 6 INSTRUMENT READINGS/STATUS SEQUENCE NO 23

# SRO A.2.3

• <del>*</del> *				an a	Job	) Perf	orma	nce Measure (JPM)	
				CALIBE	RATED L	PRM RE	ADINGS	today-2xxx xx:xx CALCULATED	
							~~ ~	today-2xxx xx:xx PRINTED	
	47D		40.1	49.8	55.7	45.9	30.2	CASE ID FMLD1950708205855	
	C		57.0	59.8	60.3	64.5	43.0	LPRM SHAPE - FULL CORE	
	В		61.2 51 1	63.6	60.9 40 E	69.2	41.9	# OF WIDE DETECHED. 1	
	A		J1.1	J4.J	49.5	05.0	21.1	# OF TIPS REDECTED. I	
	39D	35.4	51.3	58.4	61.1	57.5	46.0	FAILED SENSORS:	
	С	55.8	62.7	60.3	59.6	66.5	67.9	LPRM ( 2 SIGNAL FAILED)	
	В	60.0	65.2	60.7	57.0	66.7	70.2	615A 3815D	
	A A	52.7	61.1	50.4	44.4	54.7	63.8	LPRM ( O PANACEA REJECTED)	
								OTHER SENSORS ( 0 TOTAL)	
	31D	39.9	51.6	55.8	56.0C	55.7	48.5	SUB RODS	
	C	63.7	/1.1	68.3	63.1	72.6P	, 10.4	NONE	
	В	69.6	/1.2	66.7	59.2	72.9	73.4		
	A	67.01	69.0	01.1	45.4	/1.1	/1.8	T = TIP RUN RECOMMENDED	
	220	10 0	51 2	50 I	57 0	50 F	10 0	C = MELCER LOCATION	
	23D	40.0	54.5 67 30	58.1	57.9	59.5	40.0 60.0	M = MAPRAT LOCATION $D - MELDD LOCATION$	
	В	67 1	67.30	61 /	56 9	66 6	71 1	P = PCPAT IOCATION	
	Б	66 5	58 6	48 7	44 2	55 6	66 1	* = MILTIPLE LIMIT	
	n	00.5	50.0	40.7	11.2	55.0	00.1	- MODITIDE DIMIT	
· · · · · · · · · · · · · · · · · · ·	15D	28.5	46.2	55.5	57.2	0.0	39.4		- Charles and and and an and a standard and and a
	C	42.4	63.6	62.8	59.1	65.4	59.1		
	В	43.2	68.6	61.9	5/.4	67.6	62.2		
	A	0.0	01./	49.9	44.5	04.3	50.4		
	07D		29.1	39.3	40.7	36.6		need to be a set of the	
	C C		41.4	58.6	56.6	54.5			n en
	B		42.3	64.8	61.8	58.3			
	A		31.2	57.2	55.6	48.4			
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	CORE FLO	W 8	9.8%	OPER	SUB FL	.OW	-1.2%	DP CALC PST 20.52	
	LOAD LIN	E 10	7.2%	FLOW	BASTS	ion	MEAS	FEEDWTR FLOW MLB/HR 12.35	
	20112 2110			1 2011	211020				
	APRM	CALIB	RATION						
		А	В		С	D			
	READING	100.4	100	.6 :	100.2	100.2			
	AGAF	0.994	0.9	92 (	).997	0.997			An the second
	קדית	RUNS P	ECOMME	NDED					
		1.01.0 K							

STRINGS: NONE

# lastpage

Page 24 of 24
# SRO A.2.3

# Job Performance Measure (JPM)

UNIT 1, PAGE 1 OF 1

Initial positions

OD-7, CONTROL ROD NOTCH POSITIONS, NEW SCAN OPTION 4

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# SRO A.2.3

Job Performance Measure (JPM)

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# Job Performance Measure (JPM)

SRO A.2.3

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	UNIT	1, PAGE	1 OF	1	Fina	1 tions									
	OD-7, Optio	CONTROL N 2	ROD	NOTCH	POSII	TIONS,	NEW	SCAN							
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	13		48	3 48	48	48	48	48	48	48	48	48	48		
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	5				48	48	48	48	48	48	48				
						· ·									
		4	8	12	16	20	24	28	32	36	40	44	48	52	





NRC SUBMITTAL COPY

# JPM NUMBER: SRO A.3.3

**REVISION: 00** 

# 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 through 11 below.

- 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, or simulator)
  - 4. Initial setup conditions are identified.
  - 5. Initiating and terminating cues 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 (\*).
  - Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev. \_\_\_\_\_ Date
  - 9. Pilot test the JPM:
    - a. verify cues both verbal and visual are free of conflict, and b. ensure performance time is accurate.
  - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
  - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

 SME/Instructor
 Date

 SME/Instructor
 Date

SME/Instructor

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: SRO A.3.3

REVISION: 00

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

Page 3 of 10

# JPM NUMBER: SRO A.3.3

**REVISION: 00** 

Operator's Name:
Job Title: SRO
<ul> <li>JPM Title: Mechanical Vacuum Pump is Directed to be Secured on High Radiation Signal in HVAC Stack.</li> <li>JPM Number: SRO A.3.3</li> <li>Revision Number: <u>00</u></li> <li>Task Number and Title: Ability to control radiation releases</li> </ul>
K/A Number 2.3.11 Importance SRO 3.2
<b>Suggested Testing Environment:</b> With the cues any, but can be setup on the Simulator
Actual Testing Environment: 🖸 Simulator 🖵 Plant 📮 Control Room
<b>Testing Method:</b> Simulate Alternate Path / Faulted: Yes No Perform
Time Critical: 🛛 Yes 🔳 No
Estimated Time to Complete: <u>10</u> minutes Actual Time Used: minutes
References:
CPS No. 4979.01, Abnormal Release of Airborne Radioactivity, Rev. 8

CPS No. 4979.01, Abnormal Release of Airborne Radioactivity, Rev. 8 CPS No. 5140.41, AR/PR Annunciator-HVAC Exhaust PRM #1, Rev. 0 CPS No. 3315.03, Radiation Monitoring (AR/PR), Rev. 1

Page 4 of 10

	CLINTON POWER STATIO	ON
144 N 14 14 14	SYSTEM JPM	······································
	JPM NUMBER: SRO A.3.3	REVISION: 00
	EVALUATION SUMMARY:	
	Were all the Critical Elements performed satisfactorily?	U Yes U No
	The operator's performance was evaluated against the star and has been determined to be: $\Box$ Satisfactory	ndards contained in this JPM, Unsatisfactory
	Comments:	
		·
	·	
		<u></u>
	Evaluator s Name:	
		Data

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# JPM NUMBER: SRO A.3.3

# **REVISION: 00**

# **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.

# SIMULATOR SET-UP CONDITIONS:

1. If using the Simulator, initialize in a Startup IC with a Mechanical Vacuum Pump in service. Ramp HVAC Stack #1, Ch 1 PRM to a value that places the channel in High alarm status.

2. Shutdown the AR/PR history files

## TASK STANDARDS:

Directs to secure all operating Mechanical Vacuum Pumps.

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

None

## **PROCEDURAL/REFERENCES:**

CPS No. 4979.01, Abnormal Release of Airborne Radioactivity CPS No. 5140.41, AR/PR Annunciator-HVAC Exhaust PRM #1 CPS No. 3315.03, Radiation Monitoring (AR/PR)

# **EVALUATOR INSTRUCTIONS:**

Any amplifying cues are provided within the JPM steps.

Simulator setting provide the simulator cue:

Take the Simulator out of FREEZE after the examinee acknowledges the Initiating Cue. Other setting provide the other cue

# **INITIAL CONDITIONS AND INITIATING CUE:**

Cue for a non-simulator setting:

- 1. You are the Control Room Supervisor., a Startup is in progress.
- 2. The Mechanical Vacuum Pump is being used to draw the initial vacuum.
- 3. The following conditions exist:
  - 5140.41, HVAC Exhaust PRM #1 0RIX-PR001 Ch. 1 Alert and High Alarm is energized
  - EZTrend graph shows trending up to the Alert and High alarms over the last hour. ARP directs entry to CPS 4979.01, Abnormal Release of Airborne Radioactivity.

Respond to these conditions.

Cue for a simulator setting:

- You are the Control Room Supervisor, A Startup is in progress
- 5140.41, HVAC Exhaust PRM #1 0RIX-PR001 Ch. 1 Alert and High Alarm is energized, EZTrend graph shows trending up to the Alert and High alarms over the last hour.. ARP directs entry to CPS 4979.01, Abnormal Release of Airborne Radioactivity.

Respond to these conditions

# JPM NUMBER: SRO A.3.3

# **REVISION: 00**

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

# JPM NUMBER: SRO A.3.3

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# **REVISION: 00**

# **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**

	Enter CPS No. 4979.01, Abnormal Release of Airborne Radioactivity.
Standard	Examinee enters CPS No. 4979.01.
Comments	
	SAT UNSAT Comment Number
Step 2	Enter AR/PR Action Table 2.
Standard	Examinee enters AR/PR Action Table 2.
Comments	n en
	SAT UNSAT Comment Number
*Step 3	Directs the Mechanical Vacuum pumps to be stopped
Standard	Examinee directs the mechanical vacuum pump to be stopped
Comments	
	SAT UNSAT Comment Number
TERMINATING	CUES:
	atad accuring the Machanical Machan
The CRS has direc	cied securing the Mechanical vacuum Pump
The CRS has direct	cted securing the Mechanical Vacuum Pump.
The CRS has direct The JPM is compl	ete.

# JPM NUMBER: SRO A.3.3

# **REVISION: 00**

# **INITIATING CUE**

1. You are the Control Room Supervisor. A Startup is in progress.

2. The Mechanical Vacuum Pump is being used to draw the initial vacuum.

3. The following conditions exist:

• 5140.41, HVAC Exhaust PRM #1 – 0RIX-PR001 Ch. 1 Alert and High Alarm is energized

• EZTrend graph shows trending up to the Alert and High alarms over the last hour. ARP directs entry to CPS 4979.01, Abnormal Release of Airborne Radioactivity.

Respond to these conditions.

# JPM NUMBER: SRO A.3.3

# **REVISION: 00**

# INITIATING CUE Simulator Setting

- You are the Control Room Supervisor. A Startup is in progress.
- 5140.41, HVAC Exhaust PRM #1 0RIX-PR001 Ch. 1 Alert and High Alarm is energized, EZTrend graph shows trending up to the Alert and High alarms over the last hour.. ARP directs entry to CPS 4979.01, Abnormal Release of Airborne Radioactivity.
   Respond to these conditions

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# JPM NUMBER: SRO A.4.3

**REVISION: 00** 

# 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 through 11 below.

- 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, or simulator)
    - 4. Initial setup conditions are identified.
    - 5. Initiating and terminating cues 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 (\*).
  - Verify the procedure referenced by this JPM matches the most current revision of that procedure: Procedure Rev.
    - Pilot test the JPM:
       a. verify cues both verbal and visual are free of conflict, and
       b. ensure performance time is accurate.
    - 10. If the JPM cannot be performed as written with proper responses, then revise the JPM.
  - 11. When JPM is revalidated, SME or Instructor sign and date JPM cover page.

SME/Instructor

Date

SME/Instructor

Date

SME/Instructor

Date

# JPM NUMBER: SRO A.4.3

# **REVISION: 00**

# **Revision Record (Summary)**

1. **Revision 00,** This is a new JPM

# JPM NUMBER: SRO A.4.3

# **REVISION: 00**

Operator's Name:
Job Title: SRO
JPM Title:Determine a PAR JPM Number:SRO A.4.3 Revision Number: <u>00</u> Task Number and Title: Knowledge of emergency plan protective action recommendations
K/A Number 2.4.44 Importance SRO 4.0
Suggested Testing Environment: Any location with same references as the Simulator
Actual Testing Environment: 🛛 Simulator 🖵 Plant 🖵 Control Room
Testing Method:□ Simulate Alternate Path / Faulted: □ Yes ■ No ■ Perform
Time Critical: M Yes 🖸 No
Estimated Time to Complete: 15 minutes Actual Time Used: minutes

# **References:**

EP-AA-111, EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS

Radiological Emergency Plan Annex for Clinton Station

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JPM NUMBER: SRO A.4.3			RE	VISION <u>: 0</u>
<b>EVALUATION SUMMARY:</b> Were all the Critical Elements per	formed satisfactorily?		les 🗖	No
The operator's performance was e and has been determined to be:	valuated against the sta Satisfactory	ndards con D Unsa	tained in t atisfactory	his JPM,
Comments:				
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	челинала			
Evaluator's Name:				1, d 1 - 1
Evaluator's Signature:			_ Date:	
	andar Angeler (1997) Angeler (1997)			
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# JPM NUMBER: SRO A.4.3

# **REVISION: 00**

# **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.

# SIMULATOR SET-UP CONDITIONS:

None

# TASK STANDARDS:

Determine the action is to Evacuate 5 Mile Radius & 10 Miles Downwind (Subareas 1, 4, and 5)

# TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS: None PROCEDURAL/REFERENCES:

EP-AA-111, EMERGENCY CLASSIFICATION AND PROTECTIVE ACTION RECOMMENDATIONS

Radiological Emergency Plan Annex for Clinton Station

## **EVALUATOR INSTRUCTIONS:**

Amplifying cues are provided within the JPM steps.

## **INITIAL CONDITIONS AND INITIATING CUE:**

- 1. A General Emergency has just been declared.
- 2. Containment Temperature is 130 °F, pressure risen to 2.2 psig, steady
- 3. Reactor Water level is -109 inches.
- 4. Radiation levels in the containment are 13860 R/hr stable.
- 5. RWCU Pump Room A is 217°F and rising
- 6. The wind direction is 321°
- 7. You are to determine the Protective Action Recommendations.

# START TIME:

# JPM NUMBER: SRO A.4.3

# **REVISION: 00**

# **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

Step 1	Evaluates Fission Product Barrier Matrix							
Standard	Standard Fission Product Barrier Matrix to evaluate Fission Product Barrier Status							
Comments								
	SAT UNSAT Comment Number							
Step 2	Determine that a Loss of RCS Barrier has occurred. Determine that a Loss of Fuel Clad Barrier has occurred.							
	Determine that a Loss of Containment Barrier has occurred.							
Standard	Examinee determines: Loss of RCS Barrier, Loss of Fuel Clad Barrier, and Loss of Containment Barrier has occurred.							
Comments								
	SAT UNSAT Comment Number							

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and a state of the	SYSTEM JPM

# JPM NUMBER: SRO A.4.3

# **REVISION: 00**

# \*Step 3Determine the action is to Evacuate 5 Mile Radius & 10 Miles<br/>DownwindStandardExaminee determines the action is to evacuate a 5 mile radius and 10 m

Examinee determines the action is to evacuate a 5 mile radius and 10 miles downwind (Subareas 1, 4, and 5).

Comments

SAT UNSAT Comment Number

# **TERMINATING CUES:**

The JPM is complete.

STOP TIME:

Verify elapsed time meets the time critical requirement

JPM NUMBER: SRO A.4.3

# **REVISION: 00**

### **INITIATING CUE**

- 1. A General Emergency has just been declared.
- 2. Containment Temperature is 130 °F, pressure risen to 2.2 psig, steady
- 3. Reactor Water level is -109 inches.
- 4. Radiation levels in the containment are 13860 R/hr stable.
- 5. RWCU Pump Room A is 217°F and rising
- 6. The wind direction is 321°
- 7. You are to determine the Protective Action Recommendations.