

INITIAL SUBMITTAL OF THE WALKTHROUGH JPMS

FOR THE CLINTON INITIAL EXAMINATION - JULY/AUG 2002

Facility: Clinton Power StationDate of Examination: 7/29/2002Exam Level (circle one): RO / SRO(I) / SRO(U)Operating Test Number: ILT0101-1

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
a. Standby Liquid Control: JPM (NEW) Initiate Standby Liquid Control, RWCU Fails to Isolate, K/A 211000.A4.06, Imp 3.9 / 3.9	N,S,A	1
b. Main Turbine Generator: JPM 011245J001, Synch Generator to Grid, K/A 245000.A4.02, Imp 3.1 / 2.9	D,S,L	4
c. Rod Control and Information System: JPM 015200J024, Defeat Rod Pattern Controller, K/A 201005.A2.04, Imp 3.2 / 3.2	D,C	7
d. Plant Ventilation: JPM 011288J005 Manual Pruge Operation of the Control Room HVAC System (VC), K/A 290003.A2.01, Imp 3.1 / 3.2	D,S	9
e. Instrument Air: JPM 015200J004, Pressurize the Containment and Drywell Instrument Air Headers, K/A 300000.A4.01, Imp 2.6 / 2.7	D,S,L	8
f. Automatic Depressurization System: JPM 011218J004, ADS Manual Initiation IAW EOP-3, K/A 218000.A4.01, Imp 4.4 / 4.4	M,S,A	3
g. Emergency Generator: JPM 011264J015, (NEW), Load Diesel Generator, K/A 264000.A4.04, Imp 3.7 / 3.7	S,N,A	6

B.2 Facility Walk-Through

a. RHR: Suppression Pool Cooling Mode: JPM 011205J001, Suppression Cooling from Remote Shutdown Panel, K/A 219000.A2.13, Imp 3.5 / 3.7	D,S,A	5
b. Reactor Pressure Regulating: JPM 41248J002, Respond to Low Hydraulic Pressure on Steam Bypass Hydraulic Power Unit, K/A 241000.A2.06, Imp 3.1 / 3.2	D,R	3
c. Emergency Generators: JPM 011264J001, DG Emergency Shutdown, K/A 264000.A3.03, Imp 3.4/3.4	D,R,A	6

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow Power, (R)CA

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.a.1

Revision Number: 00

Date: 04/19/2002

Developed By: Paul M. Higginbotham
Instructor

4/19/02
Date

Validated By: T Pickley
SME or Instructor

5/5/02
Date

Review By: P. O'Brien
Operations Representative

5/10/02
Date

Approved By: B. Price
Training Department

5/21/02
Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

REVISION: 00

Revision Record (Summary)

1. Revision 00, This is a new JPM

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

REVISION: 00

Operator's Name: _____
Job Title: ☐ RO ☐ SRO

JPM Title: Initiate Standby Liquid Control, RWCU Fails to Isolate
JPM Number: B.1.a.1
Revision Number: 00
Task Number and Title: 441110.01, Complete Control Room Actions to Perform SLC
Initiation

K/A Number 211000.A4.06 Importance 3.9 / 3.9

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: 10 minutes **Actual Time Used:** _____ minutes

References: CPS 4411.10, SLC OPERATIONS, Revision 3, Step 2.1

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.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.

SIMULATOR SET-UP CONDITIONS:

Initialize in a full power IC.
Insert malfunctions to defeat automatic and manual scram signals.
Defeat isolation of RWCU due to SLC initiation.

TASK STANDARDS:

SLC has been initiated.
RWCU 1G33-F001 and F004 have been closed manually.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 4411.10, SLC OPERATIONS, Revision 3, Step 2.1

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

The plant is in an ATWS condition.
You are directed to initiate SLC per CPS 4411.10, SLC OPERATIONS.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: **B.1.a.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

CPS 4411.10, SLC OPERATIONS

***2.1.1 (1) Place handswitch for both SLC Pumps A and B, 1C41-C001A(B) to the RUN position.**

Standard Rotates the handswitches for both SLC pump A and B to the RUN position and allows them to spring-return to normal.
Observes the AMBER light for both pumps illuminate.

CUE

Comments

SAT UNSAT Comment Number

2.1.1 (2) Record start time: _____

Standard Start time of the SLC pumps is recorded.

CUE

Comments

Examinee may report start time to the CRS for recording.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

REVISION: 00

2.1.2 (1) Verify SLC initiation sequence:
 SLC DISCH TO RPV SQUIB A AND B CONTINUITY lights go out.
Standard Verifies SLC DISCH TO RPV SQUIB A AND B CONTINUITY lights go
 out.

CUE

Comments

SAT UNSAT Comment Number

2.1.2 (2) SLC A(B) OUT OF SERVICE annunciators 5067(66)-8F alarm.

Standard Verifies SLC A(B) OUT OF SERVICE annunciators 5067(66)-8F alarm
 actuates.

CUE

Comments

SAT UNSAT Comment Number

2.1.2 (3) SLC Suct Valve (Vlv) A(B) Fm SLC Strg (Stor) Tank [1C41-F001A(B)]
 valves open.
 1C41-F001A(B) will not open unless SLC Man Suct Vlv Fm SLC Test
 Tank [1C41-F031] (normally locked shut) is fully shut.

Standard Verifies SLC Suct Valve (Vlv) A(B) Fm SLC Strg (Stor) Tank [1C41-
 F001A(B)] valves open.
 Observes RED lights for both suction valves are illuminated.

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

REVISION: 00

*2.1.2	(4)	1G33-F001 & F004, RWCU Inbd (Outbd) Suct Isol shut, unless the isolation logic is bypassed for RPV pressure control.
Standard		Reports 1G33-F001 & F004, RWCU Inbd (Outbd) Suct Isol failed to shut. Places handswitches for both 1G33-F001 & F004 to close. Observes RED lights for both 1G33-F001 & F004 illuminate, GREEN goes off.
CUE		If requested, state the isolation logic for 1G33-F001 & F004 is not defeated.
Comments		May report failure of 1G33-F001 & F004 to close to the CRS and request direction.

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

REVISION: 00

2.1.2 (5) SLC Pump A(B), 1C41-F001A(B) start when its respective suction valve is fully open.

SLC pumps will start if SLC Man Suct Vlv Fm SLC Test Tank [1C41-F031] (normally locked shut) is open

Standard

Verifies SLC Pump A(B), 1C41-F001A(B) start when its respective suction valve is fully open.

Observes RED light for both pumps illuminate.

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

2.1.3

IF RWCU is being used for RPV pressure control,

THEN Verify the Regen Hx and Filter Demin are bypassed.

Standard

Verifies RWCU is NOT being used for RPV pressure control.

CUE

If asked, inform the examinee RWCU is not being used for RPV pressure control.

Comments

SAT	UNSAT	Comment Number
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CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

REVISION: 00

- 2.1.4 Verify SLC solution injecting into the RPV by observing:
- SLC Strg Tank Level, 1C41-R601 lowering.
 - SLC Pump Disch Header Press, 1C41-R600 is slightly > RPV pressure
 and is < 1400 psig.
 - Reactor power lowering.

Standard Monitor Storage Tank level and observe level is lowering.
 Verifies SLC pump discharge pressure id above RPV pressure.
 Verifies Reactor power is lowering.

CUE

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

Proper SLC initiation is verified and RWCU 1G33-F001 & F004 are closed.

STOP TIME: _____

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
211000	A4.06	3.9	3.9

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.a.1

REVISION: 00

INITIATING CUE

The plant is in an ATWS condition.
You are directed to initiate SLC per CPS 4411.10, SLC OPERATIONS.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.b 1

Revision Number: 03

Date: 4/12/2002

Developed By: <u>D Antonelli</u>	<u>4/12/02</u>
Instructor	Date
Validated By: <u>T Pickley</u>	<u>5/4/02</u>
SME or Instructor	Date
Review By: <u>P. O'Brien</u>	<u>5/10/02</u>
Operations Representative	Date
Approved By: <u>B. Price</u>	<u>5/21/02</u>
Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

Revision Record (Summary)

1. **Revision 03,** Revised to reflect PUR changes to 3004.01 Rev 22

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

Operator's Name: _____
Job Title: ☐ RO ☐ SRO

JPM Title: Synchronize the Main Generator to the Grid
JPM Number: 011245J005
Revision Number: 03
Task Number and Title: 011245C005, Synchronize the Main Generator to the Grid

K/A Number 245000.A4.02 Importance 3.1/ 2.9

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☐ Perform **Alternate Path / Faulted:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 30 minutes **Actual Time Used:** _____ minutes

References: CPS No. 3004.01 TURBINE STARTUP AND GENERATOR
SYNCHRONIZATION
CPS No. 3105.05 GENERATOR

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

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) Initialize in IC -21, Generator Ready to Sync, and Power is 12- 16%, make sure power is close to 16%
- 2) Lower grid voltage to 352 Kv
- 3) Need CPS No. 3004.01 completed through step 8.2.9.
- 4) Perform Generator startup per CPS No. 3105.05, sections 8.1.1 and 8.1.2 to prepare generator for synchronization.
 - a) Generator Gas Pressure Set at 45 psig to 50 psig or more
 - b) Field breaker closed with terminal voltage at ~22,000 volts.
 - c) Voltage Regulator controls in "Auto" and DC Regulator fully lowered
- 5) Filled out switching order.

TASK STANDARDS:

Synchronize the Main Generator to the Grid
Demonstrate use of Core Work Practices.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3004.01 TURBINE STARTUP AND GENERATOR SYNCHRONIZATION

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.
Evaluator provides switching order to Examinee. The switching order is kept in the CRS desk.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

INITIAL CONDITIONS AND INITIATING CUE:

- All steps up to and including 8.2.9 of CPS 3004.01 TURBINE STARTUP AND GENERATOR SYNCHRONIZATION are complete and signed off. Cooling water is available to the Turbine Lube Oil Coolers.
- CPS No. 3105.05 GENERATOR, section 8.1.1 and 8.1.2 are complete placing the Voltage Regulator in Automatic at ~22,000 terminal volts.
- Reactor power is between 12-16%.
- You are to synchronize the Main Generator to the Grid per the switching order and 3004.01.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

PERFORMANCE INFORMATION

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

PERFORMANCE STEPS

CPS No. 3004.01 TURBINE STARTUP AND GENERATOR SYNCHRONIZATION

8.2.10 Generator Synchronization

8.2.10.1 Turn off auto reclosures for breakers 4506 & 4510.

Standard Directs the area operator to turn off reclosers for breakers 4506 and 4510.

CUE Area operator reports reclosers are off for 4506 and 4510.
Comments

SAT UNSAT Comment Number

***8.2.10.2 Open unit breakers 4506 and 4510.**

Standard Opens unit breakers 4506 and 4510.

CUE Operator should make PA announcements on equipment operation
Comments throughout
SAT UNSAT Comment Number

8.2.10.3 Locally verify breakers 4506 and 4510 open.

Standard Instructs area operator to verify 4506 and 4510 open.

CUE Area operator reports 4506 and 4510 are open
Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

8.2.10.4 (Elec Maint to perform) Locally verify all three phases of the 345 Kv ring bus between breakers 4506 & 4510, and MOD 4508 are deenergized using the AB CHANCE SUPER TESTER (or equivalent) on the 100 - 800 Kv range.

Standard Instructs Electrical Maintenance to verify all three phases of 4506 and 4510, and MOD 4508 are deenergized using the AB Change Super Tester on the 100-800 Kv range.

CUE Electrical Maintenance reports all three phases of 4506 and 4510, and MOD 4508 are deenergized.

Comments

SAT UNSAT Comment Number

8.2.10.5 Locally engage the linkage for MOD 4508, and verify the MOD indicates fully open.

Standard Instruct area operator to engage the linkage for MOD 4508. Verify the MOD indicates fully open.

CUE Area operator reports the linkage for MOD 4508 is engaged.

Comments

SAT UNSAT Comment Number

***8.2.10.6 Close MOD 4508 from the MCR.**

Standard Close MOD 4508 from the MCR.

CUE

Comments

SAT UNSAT Comment Number

8.2.10.7 Locally verify MOD 4508 closed.

Standard Directs area operator to verify MOD 4508 closed.

CUE Area operator reports MOD 4508 closed all three phases

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

***8.2.10.8 Turn ON breaker 4510 (or 4506) Synch Switch.**

Standard Turns ON breaker 4510 (or 4506) Synch Switch On .
CUE
Comments Bkr 4506 or 4510 may be used interchangeably

SAT UNSAT Comment Number

NOTE

Steps 8.2.10.9 & 10 may be performed concurrently.

8.2.10.9 Match Incoming Voltage to Running voltage.

Standard Incoming Voltage to Running voltage matched.
CUE
Comments Adjust voltage using RAISE/LOWER on AC Regulator.

SAT UNSAT Comment Number

***8.2.10.10 Adjust turbine speed using the Load Selector to establish a desired slow rotation in the fast direction on the synchroscope.**

Standard Synchroscope rotating slow in the fast direction. (Clockwise)
CUE
Comments Depress the INCREASE/DECREASE pushbuttons on the Load Selector.

SAT UNSAT Comment Number

***8.2.10.11 Close selected unit breaker 4510 (or 4506) as the synchroscope's pointer nears the vertical (~ 12 o'clock) position and the synchronizing lamps go dark.**

Standard Both red lights "ON," 345kV Breaker 4510 (or 4506) closed.
CUE
Comments Breaker 4510 (or 4506) should be closed when the synchroscope pointer
nears 12 o'clock. Also may verify position by red light on mimic P870.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

- *8.2.10.12 Raise generator load by selecting INCREASE on the Load Selector until bypass valves are shut and Load Set indication on 1H13-P678 is 500 MWe.**

Standard	Raises generator load by selecting INCREASE on the Load Selector until bypass valves are shut and Load Set indication on 1H13-P678 is 500 MWe.
CUE	
Comments	This should be done quickly after closing breaker 4510 (or 4506) to minimize low load operation < 50 MWe on the Turbine Generator.

SAT UNSAT Comment Number

NOTE

Turbine EHC system is now on pressure control.

- 8.2.10.13 Turn OFF the unit breaker 4510 (or 4506) Synch Switch previously selected, and then, Turn ON the Synch Switch for the breaker that is open.

Standard	Unit Bkr 4510 (4506) Synch Switch in OFF Unit Bkr 4506 (4510) Synch Switch in ON
CUE	
Comments	

SAT UNSAT Comment Number

- 8.2.10.14 Verify the synchroscope is not moving and close the unit breaker 4506 (4510).

Standard	Verify both RED lights ON and GREEN light OFF for 4506 (4510)
CUE	
Comments	

SAT UNSAT Comment Number

- 8.2.10.15 Turn OFF the selected Synch Switch.

Standard	Turn OFF the selected Synch Switch.
CUE	
Comments	Incoming and Running voltage meters go to zero.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011245J005

REVISION: 03

8.2.10.16 Turn auto reclosures for breakers 4506 and 4510 ON.

Standard Directs area operator to turn auto reclosures for breakers 4506 and 4510 ON.

CUE Area operator reports auto reclosures for breakers 4506 and 4510 are turned on.

Comments

SAT UNSAT Comment Number

8.2.10.17 Notify the Electric Supply Dispatcher of the completed switching order.

Standard Electric Supply Dispatcher is informed of the completed switching order.

CUE As Electric Supply Dispatcher cue date and time reported executed on the switching order.
The operator should log the date and time.

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

The Main Generator is synchronized to the Grid with the Turbine Bypass valves closed.

STOP TIME: _____

K/A REFERENCE NUMBERS

		<u>Importance Rating</u>	
<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
245000	A4.02	3.1	2.9
	A4.05	2.7	2.7

INITIATING CUE

- All steps up to and including 8.2.9 of CPS 3004.01 TURBINE STARTUP AND GENERATOR SYNCHRONIZATION are complete and signed off. Cooling water is available to the Turbine Lube Oil Coolers.
- CPS No. 3105.05 GENERATOR, section 8.1.1 and 8.1.2 are complete placing the Voltage Regulator in Automatic at ~22,000 terminal volts.
- Reactor power is between 12-16%.
- You are to synchronize the Main Generator to the Grid per the switching order and 3004.01.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.c 1

Revision Number: 02

Date: 4/16/2002

Developed By:	<u>D Antonelli</u>	<u>4/16/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/21/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/21/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J024

REVISION: 2

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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J024

REVISION: 2

Revision Record (Summary)

1. Revision 02, Update to new procedure.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J024

REVISION: 2

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Defeating the Rod Pattern Controller

JPM Number: 015200J024

Revision Number: 02

Task Number and Title: 015200C607 Defeating the Rod Pattern Controller per
CPS No. 4410.00C012

K/A Number 201005.A2.04, Imp Importance 3.2 / 3.2

Suggested Testing Environment: Control Room Simulation

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:

4410.00 DEFEATING SYSTEM INTERLOCKS
4410.00C012 DEFEATING ATWS INTERLOCKS

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J024

REVISION: 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.

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

SIMULATOR SET-UP CONDITIONS:

Not applicable

TASK STANDARDS:

The Rod Pattern Controller is defeated using 4410.00C012, DEFEATING ATWS INTERLOCKS.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

EOP Tool Bag

PROCEDURAL/REFERENCES:

4410.00C012 DEFEATING ATWS INTERLOCKS

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

Student will demonstrate knowledge of EOP tools, procedures and equipment location. Direct the examinee to the bottom drawer for training tools and equipment. Provide examinee the procedure.

INITIAL CONDITIONS AND INITIATING CUE:

CAUTION

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

You are directed to defeat the Rod Pattern Controller per CPS No. 4410.00C012.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J024

REVISION: 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

4410.00C012 DEFEATING ATWS INTERLOCKS, 3.3, Defeating Rod Pattern Controller
Div 1: 1H13-P661

- *a) **At panel 1H13-P661, Bay D, Row A11, Card 23 (RCIS, C11-N654A), ATM Trip Circuit 1, turn the SET adjustment screw CLOCKWISE 26 full turns.**

Standard	Correct location is identified. Correct set adjustment screw located. Set adjustment screw is simulated turned clockwise 26 turns.
CUE	As examinee performs each task reply: <ul style="list-style-type: none">• On the SET adjust screw• Turning in direction• (after demonstrating or stating he would perform 26 full turns state: 26 full turns completed
Comments	

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J024

REVISION: 2

Div 2: 1H13-P662

- *b) At panel 1H13-P662, Bay B, Row A11, Card 23 (RCIS, C11-N654B), ATM Trip Circuit 1, turn the SET adjustment screw CLOCKWISE 26 full turns.

Standard

Correct location is identified.

Correct set adjustment screw located.

CUE

Set adjustment screw is simulated turned clockwise 26 turns.

As examinee performs each task reply:

- On the SET adjust screw
- Turning in direction
- (after demonstrating or stating he would perform 26 full turns state: 26 full turns completed

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

The Rod Pattern Controller is reported defeated.

STOP TIME: _____

K/A REFERENCE NUMBERS

K/A SYSTEM NUMBER
201005

K/A NUMBER
A2.04

<u>Importance Rating</u>	
<u>RO</u>	<u>SRO</u>
3.2	3.2

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J024

REVISION: 2

INITIATING CUE

CAUTION

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

You are directed to defeat the Rod Pattern Controller per CPS No. 4410.00C012.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.d.1

Revision Number: 01

Date: 05/016/2002

Developed By: B. Price 5/16/02
Instructor Date

Validated By: L. Pickley 5/16/02
SME or Instructor Date

Review By: P. O'Brien 5/17/02
Operations Representative Date

Approved By: B. Price 5/21/02
Training Department Date

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

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011288J005

REVISION: 01

Revision Record (Summary)

1. **Revision 01** This is revision is due to new Exelon format.

CLINTON POWER STATION

JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011288J005REVISION: 01

Operator's Name: _____ SS# _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Manual Purge Operation of the Control Room HVAC System (VC)

Task Number and Title: 011288C537 / Manual Purge Operation of the Control Room HVAC System (VC)

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control RoomTesting Method: ☐ Simulate
☒ PerformFaulted: ☐ Yes ☒ No
Alternate Path: ☐ Yes ☒ NoTime Critical: ☐ Yes ☒ No

Estimated Time to Complete: 10 minutes Actual Time Used: _____ minutes

References: CPS No. 3402.01, CONTROL ROOM HVAC (VC), Section 8.2.1

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ NoThe operator's performance was evaluated against the standards contained in this JPM, and has been determined to be: ☐ Satisfactory ☐ UnsatisfactoryComments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION

JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011288J005

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:

Initialize to any suitable IC, ensure a VC train is running in normal mode.
Initiate PC103 for VC "A" and PC104 for VC "B" to OFF to trip off both VC chillers

TASK STANDARDS:

The VC System is running in the Manual Purge mode of operation.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3402.01, CONTROL ROOM HVAC (VC), Section 8.2.1

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.
May be applied to either VC train

INITIAL CONDITIONS AND INITIATING CUE:

Both VC Chillers are out of service. Control Room temperatures exceed outside air temperature.
To prevent overheating NSPS panel, place the Control Room HVAC train in Manual Purge per
CPS No. 3402.01, Section 8.2.1

START TIME: _____

CLINTON POWER STATION

JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011288J005

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

8.2.1 Manual Purge Initiation

NOTE

- 1) In the event both Control Room HVAC Trains cooling capability is lost, the Manual Purge Mode may be used to prevent NSPS panels from overheating, when Control Room temperature exceeds the outside air temperature.
- 2) During operation in the purge mode, Cooling Coil 0VC06AA(B) may auto blow down due to inlet air temperature $\leq 49^{\circ}\text{F}$. An auto blow down may spray equipment in the vicinity of the drain and complicate restoration of VC chilled water.
- 3) In the event of detection of smoke or products of combustion in the areas served by the Control Room HVAC system, the Manual Purge mode may be used to purge smoke from the control room.

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011288J005

REVISION: 01

1 **IF** Outside air temp is approaching $\leq 49^{\circ}\text{F}$ and time permits,
THEN Manually drain operating train Cooling Coil 0VC06AA(B) as follows:

- a) Shut down chiller per section 8.1.4.
- b) Turn off operating Chilled Water Pump breaker, 0VC08PA at Cont Bldg MCC E1 (0AP54EA) or 0VC08PB at Cont Bldg MCC F1 (0AP55EA).
- c) Close 0VC040A(B), Coil Inlet Isol and 0VC007A(B), Coil Outlet Isol.
- d) Open 0VC062A(B) and 0VC061A(B), Coil HP Vents.
- e) Open 0VC015A(B), Coil Drain and monitor drain flow

STANDARD: Does not direct shutdown of chiller and blowdown of cooling coil.

CUE: If requested, cue the operator that outside air temperature is 65°F .

COMMENTS:

SAT _____ UNSAT _____

*2 **Open 0VC05YA(B) and 0VC49YA(B), Cont Rm Purge and Max Intake Dmpr by placing Cont Rm Trn A(B) Prg Dmprs 0VC05YA/49YA(0VC05YB/49YB) control switches in the OPEN position for train in service.**

STANDARD: Operator takes handswitch for 0VC05YA and 0VC49YA to OPEN and observes RED light ON for each damper.

CUE:

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011288J005

REVISION: 01

***3**

Open 0VC48YA(B) and 0VC81YA(B), Cont Rm Max Intake and Purge Dmprs by placing Cont Rm Trn A(B) Prg Dmprs 0VC48YA/81YA(0VC48YB/81YB) control switch in the OPEN position for train in service.

STANDARD: Operator takes handswitch for 0VC48YA and VC81YA to OPEN and observes RED light ON for each damper.

CUE:

COMMENTS: This operation will actuate annunciator 5050-5L, CLOSED CONT ROOM HVAC ISOL DMPR A.

SAT _____ UNSAT _____

4 Verify 0VC04YA(B), Cont Rm Rtrn Air Dmpr is closed.

STANDARD: Operator verifies 0VC04YA CLOSED by observing GREEN light ON.

CUE:

COMMENTS:

SAT _____ UNSAT _____

TERMINATING CUES:

The VC system is running in the Manual Purge mode of operation .

STOP TIME: _____

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
290003	A2.01	3.1	3.2

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011288J005

REVISION: 01

INITIATING CUE

Both VC Chillers are out of service. Control Room temperatures exceed outside air temperature. To prevent overheating NSPS panel, place the Control Room HVAC system in Manual Purge per CPS No. 3402.01, Section 8.2.1

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.e 1

Revision Number: 03

Date: 04/18/02

Developed By: D Antonelli 4/18/02
Instructor Date

Validated By: T Pickley 5/4/02
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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

Revision Record (Summary)

1. **Revision 03,** JPM updated to new Exelon format.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

Operator's Name: _____
Job Title: ☐ RO ☐ SRO

JPM Title: Pressurize the Containment and Drywell Instrument Air Headers

JPM Number: 015200J004

Revision Number: 03

Task Number and Title: 015200C504/ Respond to a Loss of Instrument Air

K/A Number 300000 A4.01

Importance 2.6 / 2.7

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Faulted: ☐ Yes ☒ No
Alternate Path: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 20 minutes **Actual Time Used:** _____ minutes

References: CPS No. 3214.01, PLANT AIR (IA & SA)

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

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 IC with IA & SA in service, Reactor Mode Switch in SHUTDOWN, Inboard MSIV's shut.
Insert a manual scram
Shut the Containment and Drywell IA INBD and OUTBD Isol Valves (1IA005 and 1IA008).
Shut the Containment and Drywell IA INBD and OUTBD Isol Valves (1IA006 and 1IA007).
Shut the ADS IA CNMT INBD Isol Valves (IA012B and IA013B).

TASK STANDARDS:

Containment and Drywell Instrument Air headers are pressurized.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 3214.01, PLANT AIR (IA & SA)

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

An inadvertent isolation of the IA system in the containment has occurred, the isolation signal has been reset and the requirements for CPS No. 4001.02, AUTOMATIC ISOLATION, have been met. Restore air pressure in accordance with CPS 3214.01, Sect 8.1.2.5.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

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

8.1.2.5 Pressurizing the Containment and Drywell Instrument Air Header

CAUTION

When Containment and Drywell Instrument Air is restored per 8.1.2.5.1, 1SA030, 031, & 032 will open if no isolation signal is present.

NOTE

Valves 1IA005, 1IA006, 1IA007 and 1IA008 are all air operated air valves and receive their operating air from the upstream side. Valve 1IA005 must open before the downstream valves can open. There may be a slight delay from the time the valves are energized to open and they all actually indicate open.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

***8.1.2.5.1**

Open the following valves:

- a) **1IA005, Containment IA Outbd Isol Valve 1IA008, Drywell IA Hdr Inbd Isol Valve**
- b) **1IA006, Containment IA Inbd Isol Valve 1IA007, Drywell IA Hdr Outbd Isol Valve.**

STANDARD:

The operator takes the hand switches for the above listed valves to the open position.

- a) Red light is ON for 1IA005, Containment IA Outbd Isol Valve
Red light is ON for 1IA008, Drywell IA Hdr Inbd Isol Valve
- b) Red light is ON for 1IA006, Containment IA Inbd Isol Valve
Red light is ON for 1IA007, Drywell IA Hdr Outbd Isol Valve.

CUE:

COMMENTS: IA008 will not open until IA006 and IA007 are opened.

SAT _____ UNSAT _____ Comment Number _____

***8.1.2.5.2**

Restore normal ADS air supply.

- a) **Shut 1IA013A and 1IA012A (CNMT Compress Gas Outbd Isol Vlvs).**
- b) **Open 1IA013B and 1IA012B (CNMT Compress Gas Inbd Isol Vlvs).**
- c) **Return the control switches for 1IA013A and 1IA012A to AUTO.**

STANDARD:

Operator takes handswitches for 1IA013A and 1IA012A to CLOSE and observes

- a) GREEN light ON for 1IA013A, CNMT Compress Gas Outbd Isol Vlv
- b) GREEN light ON for 1IA012A, CNMT Compress Gas Outbd Isol Vlv

Operator takes handswitches for 1IA013B and 1IA012B to OPEN and observes

- a) RED light ON for 1IA013A, CNMT Compress Gas Outbd Isol Vlv
- b) RED light ON for 1IA012A, CNMT Compress Gas Outbd Isol Vlv

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

8.1.2.5.3 Verify proper operation of the Automatic Depressurization System (ADS) air amplifiers:

- a) Verify Air Amplifiers are balanced. Adjust regulators to a minimum of 60 psig to maintain downstream pressure.
- b) Verify High/Low Press ADS IA Supply Div 1 or 2 (5040-6F) annunciator is clear.

STANDARD: Operator verifies High/Low Press ADS IA Supply Div 1 or 2 (5040-6F) annunciator is clear.
Look at ADS air header pressure on 1H13-P601 Verify Air Amplifiers are balanced

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

8.1.2.5.4 Verify proper operation of ADS Air Regulating Valves 1IA044A(B) as follows:

- a) Slowly Open 1IA096D(C), Low Point Drain and bleed off air.
- b) Close 1IA096D(C).
- c) Verify ADS Air Regulating Valve 1IA044A(B) controls pressure between 135 and 165 psig.

STANDARD: Operator direct area operator to complete above step.

CUE: As area operator cue that air has been bled off and pressure is approximately 145 psig.

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J004

REVISION: 3

TERMINATING CUES:

Containment and Drywell Instrument Air headers are pressurized.

STOP TIME: _____

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER

K/A NUMBER

RO

SRO

300000

A4.01

2.6

2.7

**CLINTON POWER STATION
SYSTEMS JPM**

JPM NUMBER: 015200J004

REVISION: 03

INITIATING CUE

An inadvertent isolation of the IA system in the containment has occurred, the isolation signal has been reset and the requirements for CPS No. 4001.02, AUTOMATIC ISOLATION, have been met. Restore air pressure in accordance with CPS 3214.01, Sect 8.1.2.5.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.f 1

Revision Number: 01

Date: 4/17/02

Developed By: D Antonelli
Instructor

4/17/02
Date

Validated By: T Pickley
SME or Instructor

5/4/02
Date

Review By: P. O'Brien
Operations Representative

5/6/02
Date

Approved By: B. Price
Training Department

5/21/02
Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011218J004

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 (*).
- _____ 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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011218J004

REVISION: 01

Revision Record (Summary)

1. **Revision 01,** Update to new EOP revision and to provide simulator instructions for initial set up.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011218J004

REVISION: 01

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: ADS Manual Initiation IAW EOP-3 (Faulted)

JPM Number: 011218J004

Revision Number: 01

Task Number and Title: 011218C524 ADS Manual Initiation IAW EOP-3

K/A Number 218000.A4.01 Importance 4.4 / 4.4

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: 10 minutes **Actual Time Used:** _____ minutes

References: EOP-3

CPS No. 3101.01 MAIN STEAM (MS, IS & ADS), Step 8.2.2

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011218J004

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:

IC-1, 100% power with a normal systems lineup.

Insert malfunctions, HP13D and HP13H (to 0%) to fail 2 SRV's 1B21-F041D and 1B21-F047A in the shut position.

Insert a manual SCRAM and complete operator actions to control level and secure the Turbine Generator after coasting down. Manually initiate a Group 1 isolation.

When reactor pressure and level is stable FREEZE the simulator. Verify Drywell Pressure is not near 1.68 psig.

Start the simulator when the operator is ready to perform the JPM.

TASK STANDARDS:

Operator actions performed per EOP-3, and CPS No. 3101.01 to Manually initiate ADS with 7 Safety Relief Valves opened.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

EOP-3

CPS No. 3101.01 MAIN STEAM (MS, IS & ADS), Step 8.2.2

EVALUATOR INSTRUCTIONS:

After completion of briefing take the simulator out of FREEZE. Amplifying cues are provided within the JPM steps.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011218J004

REVISION: 01

INITIAL CONDITIONS AND INITIATING CUE:

The plant has been operating at full power for several months, when a leak occurs. The reactor is shutdown with all rods inserted. A Group 1 isolation has occurred and was verified as being successful.

The leak has increased temperature in 2 areas above the Max Safe Area Temperature Limits. The CRS has been using EOP-8 and is currently entering EOP-3.

The A CRO has control of Reactor Level.

The Containment Evacuation Alarm has been sounded.

The CRS directs you to Initiate ADS AND verify seven (7) SRVs valves opened.

START TIME:

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011218J004

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

EOP 3

Initiate ADS per 3101.01/ADS

- OK to exceed 100°F/hr cooldown.

CPS 3101.01

8.2.2 ADS Initiation (Auto/Manual)

***3.**

Manually initiate ADS:

Arm and depress all four

ADS Div 1/2 Logic A&E/B&F Initiate push-buttons.

Standard

Rotate collars and depress ADS Div 1, Logic A&E push-buttons

OR

Rotate collars and depress ADS Logic 2 B&F Initiate push-buttons.

CUE

Comments

Logic will initiate if only ADS Div 1 and/or 2 Logic A&E and/or B&F Initiate push-buttons are operated; however, procedure requires all four.

SAT UNSAT Comment Number

CLINTON POWER STATION SYSTEM JPM

JPM NUMBER: 011218J004

REVISION: 01

EOP 3

All 7 ADS valves open? Yes or No.

CPS 3101.01 8.2.2 ADS Initiation (Auto/Manual)

***4. Verify seven ADS valves open using as needed:**

- SPDS
- DCS Display 122 (2H) [Acoustic Monitor Input]
- DCS Display 186 (7B) ['A' Solenoid Input]
- 1H13-P601/P642 Solenoid Indicator Lights
- 1H13-P866, Valve Flow Monitor Control Panel (Channels 2, 4, 6, 9, 11, 13, 16)
- 1H13-P614, ADS Safety Valve Temperature recorder 1B21-R614 (Pts 1 - 7)
- Indirect indication via changes in RPV pressure, RPV level, MSL flows, & suppression pool temperatures.

Standard

Recognizes that all seven valves have not opened and reports.

CUE

As CRS acknowledge reports and tells examinee to proceed with the assigned task.

Comments

1B21-F041D and 1B21-F047A failed to open due to malfunction.

SAT UNSAT Comment Number

CLINTON POWER STATION SYSTEM JPM

JPM NUMBER: 011218J004

REVISION: 01

EOP 3

Open other SRVs until a total of seven are open

- OK to exceed 100°F/hr cooldown.

CPS 3101.01 8.2.1 SRV - Manual Operation

*3.

Place keylock switch(es) for SRV(s) to OPEN to open the SRV, or to AUTO or OFF to shut the SRV.

Verify SRV(s) open/shut as applicable using as needed:

- SPDS
- DCS Display 122 (2H) [Acoustic Monitor Input]
- DCS Display 186 (7B) ['A' Solenoid Input]
- 1H13-P601/P642 Solenoid Indicator Lights
- 1H13-P866, Valve Flow Monitor Control Panel (Channels 2, 4, 6, 9, 11, 13, 16)
- 1H13-P614, ADS Safety Valve Temperature recorder 1B21-R614 (Pts 1 - 7)
- Indirect indication via changes in RPV pressure, RPV level, MSL flows, & suppression pool temperatures.

Standard

Opens two more SRVs for a total of 7 SRVs open. Determines which valves should be open and takes the control switches to the open position.

CUE

Acknowledge the report of 7 SRVs open.

Terminate the JPM

Comments

The operator should verify the opening of the two additional valves and report back to the CRS.

SAT UNSAT Comment Number

TERMINATING CUES:

When the operator verifies that a total of seven (7) SRVs are open and reports to the CRS that seven (7) SRVs are open.

STOP TIME: _____

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER

218000

K/A NUMBER

A4.01

RO

4.4

SRO

4.4

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011218J004

REVISION: 01

INITIATING CUE

The plant has been operating at full power for several months, when a leak occurs. The reactor is shutdown with all rods inserted. A Group 1 isolation has occurred and was verified as being successful.

The leak has increased temperature in 2 areas above the Max Safe Area Temperature Limits. The CRS has been using EOP-8 and is currently entering EOP-3.

The A CRO has control of Reactor Level.

The Containment Evacuation Alarm has been sounded.

The CRS directs you to Initiate ADS AND verify seven (7) SRVs valves opened.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.g.1

Revision Number: 00

Date: 05/4/2002

Developed By:	<u>Tom Pickley</u>	<u>5/4/02</u>
	Instructor	Date
Validated By:	<u>B Price</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/10/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/21/02</u>
	Training Department	Date

NOTE: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- | | |
|----------------|------|
| SME/Instructor | Date |
| SME/Instructor | Date |
| SME/Instructor | Date |

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J015

REVISION: 00

Revision Record (Summary)

1. Revision 00, This is a new JPM

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J015

REVISION: 00

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Parallel DG 1B With Off Site Power

JPM Number: RO B.1.g.1

Revision Number: 00

Task Number and Title: 350601.05, Complete Control Room Actions to Perform
Diesel Generator – Offsite Power Parallel Operation

K/A Number 264000.A4.01

Importance 3.3 / 3.4

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Alternate Path /Faulted: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 30 minutes Actual Time Used: _____ minutes

References: CPS 9080.01, DIESEL GENERATOR 1A(B) OPERABILITY -
MANUAL AND QUICK START OPERABILITY, Revision 47, Section
8.2.13

JPM NUMBER: 011264J015

EVALUATION SUMMARY:

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: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J015

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:

Initialize to the Temporary IC established for this JPM, OR,

Initialize to any suitable IC with DG in standby, and:

- Start Diesel Generator 1B
- Transfer 4160 V Bus 1B1 to the ERAT
- Load lesson plan to fail the voltage regulator switch to raise when the output breaker is shut.
- Turn off the reclosing relays for breaker 1372, at the South Bloomington Substation, and breaker 1372, at Clinton Route 54 Substation. (Not simulated)
- Synch Switch is off with key removed
- Mark up a copy of CPS 9080.01 to Step 8.2.13 for use by the examinee in performing this JPM.
- Fill out a CPS 3506.01C002, DIESEL GENERATOR START LOG

TASK STANDARDS:

Diesel Generator 1B output breaker has been reopened.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 9080.01, DIESEL GENERATOR 1A(B) OPERABILITY - MANUAL AND QUICK START OPERABILITY, Revision 47, Section 8.2.13

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

Parallel Diesel Generator 1B with off-site power for a one hour run.

DG 1B was started per CPS 9080.01; Section 8.2 and steps are completed through Step 8.2.12.4.

Begin at Step 8.2.13.

Report when task is completed.

START TIME: _____

CLINTON POWER STATION SYSTEM JPM

JPM NUMBER: 011264J015

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

8.2.13.2 For DG 1B, place the ERAT SVC in FREEZE.

Standard Directs an operator to opened the temporary Toggle Switch, installed at local panel 1CZ02J.

Verifies that the ERAT SVC FROZEN (5011-8G) annunciator actuates.

CUE The temporary Toggle Switch, at local panel 1CZ02J is open.

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

***8.2.13.3 Place DG 1B Output BKR SYNC switch to ON position.**

Standard Inserts a key and turns the Output BKR SYNC switch to ON

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

8.2.13.4 Adjust DG 1B voltage so that INCOMING voltage is slightly higher than RUNNING voltage

Standard Examinee adjusts DG 1B voltage regulator so that incoming voltage is slightly higher than running voltage.

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: 011264J015

REVISION: 00

8.2.13.5

Adjust DG 1A(1B) speed such that DG frequency is slightly greater than bus frequency as indicated by the following:

- 1) CLOCKWISE rotation of the synchroscope at a speed of approximately one revolution every 60-120 sec (i.e., 1/2 – 1 RPM) or slower.
- 2) Both synchroscope lights are extinguished at the 12 o'clock position.
- 3) Both synchroscope lights are brightly lit at the 6 o'clock position.

Standard

Examinee adjusts DG 1B governor control switch so DG frequency is slightly greater than bus frequency by observing:

- Slow rotation in the clockwise direction
- Both synchroscope lights are extinguished at the 12 o'clock
- Both synchroscope lights are brightly lit at the 6 o'clock

CUE

Comments

SAT UNSAT Comment Number

8.2.13.6

Start GETARS recording.

Standard

Examinee requests that GETARS be started.

CUE

GETARS is running/recording.

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J015

REVISION: 00

***8.2.13.7.1**

WHEN the synchroscope's pointer nears the vertical (12 o'clock) position and the synchronizing lamps go dark, Close DG 1B Output Bkr.

Standard

When synchroscope pointer nears 12 o'clock, operator takes handswitch for DG 1B output breaker to CLOSE and observes RED light ON.

CUE

Comments

SAT UNSAT Comment Number

8.2.13.7.2

Promptly load DG 1B to at least 100 - 200 KW.

Standard

Examinee immediately loads diesel to at least >100 KW by taking governor control switch to RAISE.

CUE

Comments

SAT UNSAT Comment Number

***8.2.13.7.3**

Verify VARs between -500 and +500 KVAR; adjust as necessary.

Standard

Examinee identifies VARs are too high.

Tries to adjust and determines there is a problem with the voltage regulation.

CUE

Comments

SAT UNSAT Comment Number

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: 011264J015

REVISION: 00

CAUTION

DG Reactive (KVAR) loading shall be maintained within the limits of Appendix A, DG 1A(1B) REACTIVE LOAD CAPABILITY CURVE.

Notify SRO of voltage regulator problem

Standard	Examinee notifies SRO of voltage regulator problem.
CUE	Ask Examinee for suggested action If ann. 5007-5m 4Kv Bus volts Hi alarm activates, then announce it like as if you ar the ACRO.
Comments	Examinee should suggest unloading opening the DG output breaker.

SAT	UNSAT	Comment Number
------------	--------------	-----------------------

8.2.14.2	Lower DG 1B load to 100 - 200 KW.
-----------------	-----------------------------------

Standard	Examinee takes handswitch for DG 1B governor control switch to LOWER
-----------------	--

CUE

Comments

SAT	UNSAT	Comment Number
------------	--------------	-----------------------

8.2.14.3	Adjust DG 1A(1B) VARs to ≈ 0 KVAR
-----------------	---

Standard	Examinee takes handswitch for DG 1B voltage regulator to LOWER
-----------------	--

CUE

Comments

SAT	UNSAT	Comment Number
------------	--------------	-----------------------

CLINTON POWER STATION
SYSTEM JPM

REVISION: 00

JPM NUMBER: 011264J015

*8.2.14.4

Open DG 1B Output Bkr

Standard

Examinee takes handswitch for DG 1B output breaker to TRIP and observes
GREEN light ON

CUE

Comments

SAT

UNSAT

Comment Number

TERMINATING CUES:

DG 1B Output Breaker is reopened.

Once the DG 1B output breaker is reopened terminate the JPM.

STOP TIME: _____

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER

264000

K/A NUMBER

A2.01

A4.01

RO

3.5

3.3

SRO

3.6

3.4

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J015

REVISION: 00

INITIATING CUE

Parallel Diesel Generator 1B with off-site power for a one hour run.

DG 1B was started per CPS 9080.01; Section 8.2 and steps are completed through Step 8.2.12.4.

Begin at Step 8.2.13.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.2.a 1

Revision Number: 02

Date: 4/18/02

Developed By:	<u>D Antonelli</u>	<u>4/18/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/10/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/21/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

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 (*).
- _____ 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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

Revision Record (Summary)

1. **Revision 02**, Revised to reflect new RSP procedure 4003.01C007 RSP - DIV 1 SUPPRESSION POOL COOLING OPERATION and reformat.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

Operator's Name: _____
Job Title: ☐ RO ☐ SRO

JPM Title: Suppression Pool Cooling From The Remote Shutdown Panel Per Cps
No. 4003.01C7 - FAULTED

JPM Number: 011205J001

Revision Number: 02

Task Number and Title: 011205C519 015200C503

K/A Number 219000 A2.13 Importance 3.5 / 3.7

Suggested Testing Environment: Simulator and Inplant to locate the panel only

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform
Alternate Path / Faulted: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 20 minutes Actual Time Used: _____ minutes

References:

CPS No. 4003.01C007 RSP - DIV 1 SUPPRESSION POOL COOLING OPERATION

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

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.

SIMULATOR SET-UP CONDITIONS:

1. Initialize to any suitable IC with RHR and SX in standby (IC-1).
2. Verify, at the RSP, that SSW Strainer 1A Outlet Pressure indicator C61-R503 is reading greater than 100 PSIG.
3. Instructor Override for 1E12-F024A:
 - a. Insert Instructor Override to maintain the Remote Shutdown Panel control switch for 1E12-F024A in CLOSE. (A17_A01_S19_1 E12A-F024A_CLOSE TRUE)
 - b. Have a pending action that will place the control switch for 1E12-F024A in OPEN.

TASK STANDARDS:

RHR'A is running in the Suppression Pool Cooling mode from the Remote Shutdown Panel.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 4003.01C007 RSP - DIV 1 SUPPRESSION POOL COOLING OPERATION

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps. Student will perform JPM actions on the simulator and will be required to locate the RSD panel during the inplant walk through.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

INITIAL CONDITIONS AND INITIATING CUE:

The plant is recovering from a transient that requires operation of RHR in the Suppression Pool Cooling Mode. An unsuccessful attempt was made to place RHR Div.1 in Suppression Pool Cooling from the MCR. The operator was able to align the valves. However, when a start of the RHR Pump was attempted the breaker failed to respond. The breaker did not close and no starting current or flow was observed.

The MCR intends to use RHR B for Shutdown Cooling within the next half hour.

As a licensed operator you are directed to proceed to the Remote Shutdown panel to assume control of the lost Suppression Pool Cooling function of RHR as permitted by 4003.01 REMOTE SHUTDOWN Section 4.1, MCR Evacuation NOT Required, Loss of Vital System Control ONLY. You are to place RHR Division 1 in Suppression Pool Cooling in accordance with 4003.01C007, DIV 1 SUPPRESSION POOL COOLING OPERATION.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

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

4003.01C007 RSP - DIV 1 SUPPRESSION POOL COOLING OPERATION

4.2 Verify 1E12-F004A, RHR A Suppression Pool Suction Valve handswitch is in OPEN.
Standard Confirms 1E12-F004A is in OPEN.

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

***4.3**

Verify/place following transfer switches to EMERG:

a)	C61-S6	e) C61-S12
b)	C61-S7	f) C61-HS502
c)	C61-S8	g) C61-HS510
d)	C61-S9	

Standard Transfer switches are moved to the EMERG position.

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

4.4

Shut 1SX082A, RHR Hx 1A Makeup Cond Inlet Valve per CPS No. 4003.01C005, RSP - DIV 1 SX OPERATION (5.0).

Standard Refers to 4003.01C005 Section 5.0

CUE

Comments

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

4003.01C005, RSP - DIV 1 SX OPERATION

Section 5.0 OPERATING VALVES CONTROLLED BY MULTIPLE FUNCTION SWITCH,
C61-HS507

5.1 De-energize any open valves controlled by C61-HS507 that should remain open

Standard Confirms that no breakers need to be opened.

CUE Respond as CRS that 1SX082A RHR HX 1A MAKEUP COND INLET VLV is the only open valve.

Comments

SAT UNSAT Comment Number

5.2 Use C61-HS507 to close the desired valve(s). Watch all valve indications to ensure that only the selected valve(s) are closing.

Standard Operate C61-HS507 to close 1SX082A RHR HX 1A MAKEUP COND INLET VLV and observes that it closes and the other valves listed above do not close.

CUE

Comments

SAT UNSAT Comment Number

5.3 When valve operation is complete, return any breakers turned off back to ON.

Standard No action required

CUE

Comments

SAT UNSAT Comment Number

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: 011205J001

REVISION: 02

4003.01C007 RSP - DIV 1 SUPPRESSION POOL COOLING OPERATION

4.5 **IF** SSW Strainer 1A Outlet Press, C61-R503 < 100 psig,
 THEN Start Div 1 SX system per CPS No. 4003.01C005, RSP - DIV 1 SX
 OPERATION.

Standard Verifies that C61-R503 reads greater than 100 psig.

CUE

Comments

SAT UNSAT Comment Number

***4.6** **Open 1E12-F014A, SSW Inlet RHR Hx A Valve.**

Standard Operates control switch and observes Red light ON for 1E12-F014A

CUE

Comments

SAT UNSAT Comment Number

***4.7** **Open 1E12-F068A, RHR A Hx SSW Outlet Valve.**

Standard Operates the control switch and observes the red light ON for 1E12-F068A

CUE

Comments

SAT UNSAT Comment Number

4.8 **Open 1E12-F003A, RHR A Hx Outlet Valve.**

Standard Verifies red light ON for 1E12-F003A

CUE

Comments

Valve should already be OPEN.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

4.9 Open 1E12-F047A, RHR A Hx Inlet Valve.

Standard Operates the control switch and observes the red light ON for 1E12-F047A

CUE

Comments

SAT UNSAT Comment Number

***4.10 Shut 1E12-F048A, RHR A Hx Bypass Valve.**

Standard Holds control switch until green light ON for 1E12-F048A

CUE

Comments

SAT UNSAT Comment Number

4.11 Open 1E12-F064A, RHR Pump A Min Flow Recirc Valve.

Standard Verifies red light ON for 1E12-F064A.

CUE

Comments Valve should already be OPEN.

SAT UNSAT Comment Number

4.12 Open 1E12-F004A, RHR A Suppression Pool Suction Valve.

Standard Verifies red light ON for 1E12- F004A.

CUE

Comments Valve should already be OPEN.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

*4.13

Start RHR Pump A, 1E12-C002A.

Standard

Operates the control switch and observes red light ON for RHR Pump A and pump amps/min flow are indicated.

CUE

Comments

SAT

UNSAT

Comment Number

*4.14

Open 1E12-F024A, RHR A Test Valve To Suppression Pool.

Standard

1. Identifies and reports to CRS that 1E12-F024A will not open.
2. Directs area operator check the circuit breaker.

CUE

1. CRS advises RSP operator that the Area Operator is available in the area for support.
2. If directed to check on and reset the breaker for 1E12-F024A:
 - Report as Area Operator the breaker is tripped and you will reset it.
 - Clear the Over Ride on 1E12-F024A, activate the pending action to open this valve and report that the breaker is now closed.
3. If directed to Manually open 1E12-F024A:
 - Clear the Over Ride on 1E12-F024A, activate the pending action to open this valve.

Comments

Indicating lights for 1E12-F024A remain lit and valve will begin opening as soon as breaker is simulated reset (Override deleted), due to control power being supplied from Remote Shutdown Panel.

SAT

UNSAT

Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

4.16 WHEN RHR A flow \geq 1100 gpm,
 THEN Shut 1E12-F064A, RHR Pump A Min Flow Recirc Valve.

Standard Verifies RHR flow > 1100 gpm then SHUTS 1E12-F064A and verifies
 GREEN light ON for 1E12-F064A.

CUE

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

Examinee reports that RHR A is operating in the Suppression Pool Cooling mode from the Remote Shutdown Panel.

STOP TIME: _____

K/A REFERENCE NUMBERS

Importance Rating

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>RO</u>	<u>SRO</u>
219000	A2.13	3.5	3.7
295016	AA 1.07	4.2	1.3*

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011205J001

REVISION: 02

INITIATING CUE

The plant is recovering from a transient that requires operation of RHR in the Suppression Pool Cooling Mode. An unsuccessful attempt was made to place RHR Div.1 in Suppression Pool Cooling from the MCR. The operator was able to align the valves. However, when a start of the RHR Pump was attempted the breaker failed to respond. The breaker did not close and no starting current or flow was observed.

The MCR intends to use RHR B for Shutdown Cooling within the next half hour.

As a licensed operator you are directed to proceed to the Remote Shutdown panel to assume control of the lost Suppression Pool Cooling function of RHR as permitted by 4003.01 REMOTE SHUTDOWN Section 4.1, MCR Evacuation NOT Required, Loss of Vital System Control ONLY. You are to place RHR Division 1 in Suppression Pool Cooling in accordance with 4003.01C007, DIV I SUPPRESSION POOL COOLING OPERATION.

CLINTON POWER STATION

Job Performance Measure

JPM Number: RO B2.b 1

Revision Number: 01

Date: 4/18/02

Developed By:	<u>D Antonelli</u>	<u>4/18/02</u>
	Instructor	Date
Validated By:	<u>T. Pickley</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/10/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/21/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 041248J002

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 (*).
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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 041248J002

REVISION: 01

Revision Record (Summary)

1. **Revision 01,** Reformat and update to current procedures.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 041248J002

REVISION: 01

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Respond to Low Hydraulic Pressure on Steam Bypass EHC

JPM Number: 041248J002

Revision Number: 01

Task Number and Title: 041248C519, Respond to a low steam bypass electro-hydraulic control system pressure

K/A Number 241000.A2.06

Importance 3.1 / 3.2

Suggested Testing Environment: In Plant

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☒ Simulate ☐ Perform
Alternate Path / Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References:

CPS No. 3105.04 STEAM BYPASS AND PRESSURE REGULATOR (SB)
CPS No. 5006.02-2L STEAM BYPASS AND PRESSURE REGULATING SYSTEM
HYDRAULIC POWER UNIT FAILURE

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 041248J002

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:

Restoration of HPU Hydraulic Pressure

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

Copy of CPS No. 5006.02-2L STEAM BYPASS AND PRESSURE REGULATING SYSTEM HYDRAULIC POWER UNIT FAILURE if requested by examinee.

PROCEDURAL/REFERENCES:

CPS No. 3105.04 STEAM BYPASS AND PRESSURE REGULATOR (SB)
CPS No. 5006.02-2L STEAM BYPASS AND PRESSURE REGULATING SYSTEM HYDRAULIC POWER UNIT FAILURE

EVALUATOR INSTRUCTIONS:

Give the initiating cue at a location remote from the Hydraulic Skid so that they can demonstrate the ability to locate it in the plant.

Amplifying cues are provided within the JPM steps.

Provide the examinee a copy of CPS No. 5006.02-2L STEAM BYPASS AND PRESSURE REGULATING SYSTEM HYDRAULIC POWER UNIT FAILURE

INITIAL CONDITIONS AND INITIATING CUE:

Plant is operating at near rated thermal power when Main Control Room alarm 5006-2L HPU TROUBLE actuates.

As the Area operator is directed to investigate the alarm.

START TIME:

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 041248J002

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

***Operator proceeds to the HPU on 762' Elevation of the Turbine Building.**

Standard Operator locates the HPU

CUE

Comments

	SAT	UNSAT	Comment Number				
CPS No. 3105.04 STEAM BYPASS AND PRESSURE REGULATOR (SB)							
8.3.2 Low Hydraulic Pressure							
8.3.3							
Determines that the standby pump has not automatically started							
*1.			Manually start standby pump and check that it restores system pressure to 1500 - 1700 psig.				
Standard							
Notes system pressure is < 1300 psig and starts the standby EHC pump.							
CUE							
When examinee looks at:							
<ul style="list-style-type: none"> pressure instrument report that the running pump discharge pressure is ~ 1100 psig. Low Hydraulic pressure light is ON. 							
When the examinee investigates report that the standby pump is not running.							
If requested, respond that the running pump is not cavitating and the noise level is less than normal.							
If examinee reports to MCR requesting further instruction, ask what guidance is provided in 3105.04, direct the examinee to tell the MCR the actions that will be taken							
When the standby pump start is simulated, report discharge pressure is 1625 psig.							
Comments							
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 10%;">SAT</th> <th style="width: 10%;">UNSAT</th> <th style="width: 10%;">Comment Number</th> </tr> </thead> <tbody> </tbody> </table>					SAT	UNSAT	Comment Number
	SAT	UNSAT	Comment Number				

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: 041248J002

REVISION: 01

2. Check hydraulic pump for the following problems:
1) Pump suction filters are dirty and need cleaning.

Standard Locate suction strainer indicators.

CUE Pointer is not indicating in the RED band

Comments

SAT UNSAT Comment Number

2. Check hydraulic pump for the following problems:
2) Pump discharge filter is dirty and needs replacing.

Standard Locate discharge filter indication

CUE High Filter "A" & "B" pressure drop is NOT energized

Comments

SAT UNSAT Comment Number

2. Check hydraulic pump for the following problems:
3) Pump internal pressure compensator has failed as possibly indicated by pump running with no cavitation and little or no discharge pressure.

Standard Inquires about noise level.

CUE Respond that the running pump is not cavitating and the noise level is less than normal.
If condition is reported, respond as CRS and direct that the faulted pump be shutdown and terminate JPM.

Comments

SAT UNSAT Comment Number

3. Check shut 1C85-FV01, Suppression Header Bypass.

Standard Locate 1C85-FV01

CUE Report that it is shut if position is checked.

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION SYSTEM JPM

JPM NUMBER: 041248J002

REVISION: 01

4. Check level in the reservoir at the Normal level mark ± 3 inches.

Standard Locate reservoir level.

CUE Report level is normal.

Comments

SAT UNSAT Comment Number

5. Low hydraulic pressure could be caused by air in the suction line or the pump.

The pump will usually sound louder than normal.
Check for leaks in suction piping.

Standard Checks for air in the suction line or the pump

CUE Respond that the running pump is not cavitating and the noise level is less than normal.

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

Standby pump is running with normal pressure verified, the initial pump is secured and problem is reported to the MCR. If the operator does not secure the initial pump prior to reporting the MCR should direct the initial running pump be secured.

STOP TIME:

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER

241000

K/A NUMBER

A2.06

RO

3.1

SRO

3.2

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 041248J002

REVISION: 01

INITIATING CUE

Plant is operating at near rated thermal power when Main Control Room alarm 5006-2L HPU TROUBLE actuates.

As the Area operator you are directed to investigate the alarm.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B2c 1

Revision Number: 02

Date: 4/18/02

Developed By:	<u>D Antonelli</u>	<u>4/18/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/6/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/21/02</u>
	Training Department	Date

REVISION: 02

NOTE: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- Date _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

Revision Record (Summary)

1. Revision 01, JPM updated to revision 28a of CPS No. 3506.01, DIESEL GENERATOR AND SUPPORT SYSTEMS

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Perform an Alternate Shutdown of the 1A Emergency Diesel Generator IAW CPS No.
3506.01 (Faulted)

JPM Number: 011264J001

Revision Number: 02

Task Number and Title: 011264C523/ Perform an Emergency Stop of a Diesel Generator

K/A Number: 264000.A3.03

Importance 3.4 / 3.4

Suggested Testing Environment: Plant

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☒ Simulate
☐ Perform

Faulted: ☒ Yes ☐ No
Alternate Path: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References: CPS No. 3506.01, DIESEL GENERATOR AND SUPPORT SYSTEMS

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

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:

DG shutdown per CPS No. 3506.01.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None to perform the task,
Need a 3210 Key to unlock valve 1DO006A.

PROCEDURAL/REFERENCES:

CPS No. 3506.01, Diesel Generators and Support Systems, Section 8.4.4.1

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps. Faulted/alternate path JPM.

INITIAL CONDITIONS AND INITIATING CUE:

The 1A Emergency Diesel Generator is operating unloaded and cannot be shutdown from the Main Control Room. The CRS has directed you, the local operator, to shutdown the diesel generator IAW CPS No. 3506.01.

START TIME:

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** 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

8.4.4 Emergency Shutdown of a DG

8.4.4.1 Stopping DGs Using Emergency Stop Push-button

- 1 Depress Diesel Generator 1A Emergency stop push-button on local DG Control Panel

STANDARD: The Diesel Generator 1A "Emergency Stop" push-button is depressed.

CUE: Diesel Generator 1A continues operating. (Annunciator, Lockout Relay Tripped energized.) 86 LOR - Blue light is ON. 41R - red light is ON.

Diesel Generator is making load metallic noises, vibrating vigorously and has an unusually loud rumbling noise.

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

8.4.4.2 Stopping DGs Using Fuel Racks

STANDARD: The operator determines that step 8.4.4.2 is not a viable option and that he should continue at 8.4.4.3.

CUE: There is no other operator available locally, DG 1A continues to "operate".

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

8.4.4.3 Stopping DGs Using Overspeed Trip Devices

NOTE:

The following requires only 1 operator for DG 1A, and may be used provided no hazard from the engine to the operator is suspected. (i.e., DG rupture)

STANDARD: The operator determines that step 8.4.4.3 is not a viable option and that he should continue at 8.4.4.4.

CUE: May need to cue that the platforms on the D/G are shaking and appears to be UNSAFE.
If the operator contacts the MCR and reports the conditions, the CRS should tell him to use his best judgement for the method selected to shutdown the DG.

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

8.4.4.4 Stopping DGs by Isolating Fuel Supply

NOTE

The following requires only 1 operator and may be used if a hazard exists to the operator from the engine or the previous methods did not work. It takes 1-2 minutes for the engine to starve of fuel oil.

- *1 **Unlock and close the FO Day Tnk Supply to Engines for the applicable DG:**
• 1DO006A for DG 1A

STANDARD: The operator unlocks and closes the 1DO006A valve to shut off the fuel supply.

CUE: Ask where would get the key.

Valve is unlocked, valve handwheel is turned, valve closed.
Approximately 1 minute after closing the Day Tank Supply valve the engine sputters, does a coastdown and then stops.

COMMENTS: These valves are in the Day Tank Room and will require a standard operations key to unlock valve. They would be on the operator key ring or WCS would issue a key.

SAT _____ UNSAT _____ Comment Number _____

- *2 **Close the following Air Receiver Outlet Isol Valves for the applicable DG:**
• 1DG154 & 1DG155 for DG 1A.

STANDARD: Valves unlocked, then air receiver A/B outlet valves 1DG154 & 155 closed.
Lockwire removed, 1DG154 & 155 handles turned clockwise to be perpendicular to the pipe.

CUE:

COMMENTS: These valves are located on the Diesel Generator 1A Air Skid, and are the Air Receiver "A" (154) and "B" (155) Outlet Valves.

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

TERMINATING CUES:

Diesel Generator 1A has stopped operating and the operator actions performed per
CPS No. 3506.01, Diesel Generator and Support Systems, Sections 8.4.4.1 and
8.4.4.4 are completed.

STOP TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
264000	K4.01	3.5	3.7
264000	K4.02	4.0	4.2
264000	A3.03	3.4	3.4

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J001

REVISION: 02

CAUTION

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

INITIATING CUE

The 1A Emergency Diesel Generator is operating unloaded and cannot be shutdown from the Main Control Room. The CRS has directed you, the local operator, to shutdown the diesel generator IAW CPS No. 3506.01.

Facility: Clinton Power StationDate of Examination: 7/29/2002Exam Level (circle one): ☒ RO / ☒ SRO(I) / SRO(U)Operating Test Number: ILT0101-2

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
a. Recirculation: JPM 014202J001, Emergency Shutdown and Isolation of One RR Loop from Fast, K/A 202001.A4.01, Imp 3.7 / 3.7	S,D	1
b. Reactor Core Isolation Cooling: JPM 015200J011, Defeat Low RCIC Supply Pressure Isolation, K/A 217000.A2.02, Imp 3.8 / 3.7	C,D,L	4
c. Reactor Feedwater: JPM 011259J001, Transfer Control of Feed Reg. Valve 1FW004 to Startup Level, K/A 259002.A4.03, Imp 3.8 / 3.6	S,D,L	2
d. A.C. Electrical Distribution: JPM 011262J002, 4160 V Bus 1B1 from the main to the reserve source IAW 3501.01, K/A 262001.A1.02, Imp 3.1 / 3.5	S,A	6
e. Local Power Range Monitor: JPM 011215J001, Bypass LPRM, K/A 215005.A4.04, Imp 3.2 / 3.2	D,C	7
f. Standby Gas Treatment: JPM (NEW), Standby Gas Treatment (VG) trips upon Start, K/A 261000.A2.05, Imp 3.0 / 3.1	N,S,A	9
g. Automatic Depressurization System: JPM (NEW), Initiate ADS Loss of Normal Instrument Air, Transfer to Alternate Source, K/A 218000.A2.03, Imp 3.4 / 3.6	N,A,S,L	3

B.2 Facility Walk-Through

a. Primary Containment: JPM 015200J082, Startup Hydrogen Recombiner from Local Panel, K/A 223001.A2.04, Imp 3.7 / 3.8	R,D,L	5
b. Reactor Core Isolation Cooling: JPM (NEW) RCIC Startup at the RSD Panel with Flow Controller Failure, K/A 217000.A2.10, Imp 3.1 / 3.1	S,N,A	4
c. Fire Protection System: JPM 011268J009, Perform WS/FP Crosstie to Feed the RPV, K/A 286000.A1.05, Imp 3.2 / 3.2	M,R	2

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow Power, (R)CA

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.a.2

Revision Number: 06

Date: 04/17/2002

Developed By:	<u>C Ware</u>	<u>4/17/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/6/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/22/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

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 – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

Revision Record (Summary)

Revision	Date	Description
00	Unknown	Unknown
01	Unknown	Unknown
02	Unknown	Unknown
03	Unknown	Unknown
04	Unknown	Unknown
05	07/25/2001	JPM reviewed and revised to update to new Exelon format.
06	04/12/2002	Revised due to procedure changes.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert.

JPM Title: Emergency Shutdown and Isolation of One Reactor Recirculation Loop from Fast Speed per CPS 3302.01

JPM Number: 014202J001

Revision Number: 06

Task Number and Title: 014202C514 / Emergency Shutdown and Isolation of One Reactor Recirculation Loop from Fast Speed

K/A Number	202001	A4.01	Importance	3.7 / 3.7
	202001	A4.02	Importance	3.5 / 3.4
	202001	A4.05	Importance	3.3 / 3.3

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform Alternate Path / Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References: CPS 3302.01, Reactor Recirculation (RR)

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

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. Initialize to any suitable full power IC (IC-1) with RR Pumps in fast speed and rod line such that a single RR Pump trip does not cause entry into the Restricted Zone, Exit Region, or Controlled Entry Region.
2. Load Remote LC103 to shut 1C11-F026B using a remote or manual trigger.
3. Insert RR06C, RR Pump "B" Seal B1 Failure, 100%.
4. Insert RR06D, RR Pump "B" Seal B2 Failure, 50% with 5 minute ramp, then take the simulator out of FREEZE.
5. Start mixing compressor(s) and maintain DW pressure between 0.3 and 1.0 psig.
6. Freeze the simulator when Drywell pressure is approximately 0.6 psig.

TASK STANDARDS:

- Reactor Recirculation Pump B shutdown and the "B" Loop of RR System isolated.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 3302.01, Reactor Recirculation (RR)

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps. Take simulator out of FREEZE after examinee acknowledges the initiating cue.

INITIAL CONDITIONS AND INITIATING CUE:

The plant is operating at 100 % power. The Reactor Recirculation Pump "B" outer seal has failed and the inner seal is failing. The CRS has directed you to perform an Emergency Shutdown and Isolation of the "B" Reactor Recirculation Loop. Report when you have completed the task.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

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

8.2.3 RR Loop - Emergency Shutdown / RR Pump Trip

- *1 8.2.3.1 Trip RR Pump B, ensuring pump amps and speed show a complete pump trip:**
- from fast speed by opening Bkr 3B, 4B or 5B, or

Standard: The operator depresses the pushbuttons for the 3B, 4B, or 5B breaker to the open position. Breaker indication is green for motor breaker used. Pump amps on CRT and speed indication on P678 are zero.

Cue:

Comments: Operator may lower reactor water level prior to tripping the pump.

SAT UNSAT Comment Number

- *2 8.2.3.2 Shut 1B33-F067B, Discharge Vlv.**

Standard: The close pushbutton for 1B33-F067B is depressed, and when the valve is shut, observes its red light is "OUT" and the green light is "ON" (indicates shut).

Cue:

Comments: It will take two minutes to fully close this valve.
The annunciator "RECIRC MTR B LS AUTO XFER CKT NA" will alarm when 1B33-F067B closes.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

3 8.2.3.3

Enter CPS 4008.01, Abnormal Reactor Coolant Flow. 3.0

IMMEDIATE OPERATOR ACTIONS

3.1 SCRAM the reactor if any of the following occur:

- RESTRICTED ZONE is entered.
- Core instabilities are observed.
- No RR pumps are operating with mode switch in RUN.
- Power is approaching any automatic SCRAM setpoint.

Standard: Verifies Immediate Operator Actions. Informs CRS that plant is not in the Restricted Zone, Exit Region, or Controlled Entry Region.

Cue: Respond to report of IA completed

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

4 8.2.3.4

Continue to evaluate degrading plant conditions to determine if Loop Isolation per Section 8.2.4 will be required.

Standard: Continues to Section 8.2.4 for loop isolation.

Cue:

Comments: Isolation of loop was part of the initiation cue.

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

8.2.4 Idle RR Loop - Isolating

*5 8.2.4.1 Shut 1G33-F106, Recirc Loop B Suct. [RT vlvs]

Standard: The operator depresses the CLOSE pushbutton for 1G33-F106, the valve should indicate shut, green light "ON", red light "OFF".

Cue: If requested state that B RR Seal Cavity is 147°F

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

7 8.2.4.3 Shut/Verify shut 1B33-F075B, Pmp B Seal Stag Shutoff Vlv.

Standard: The operator takes the 1B33-F075B switch to the CLOSE position.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

*8 8.2.4.4

Shut 1B33-F023A(B), Pmp Suction Vlv.

Standard: The operator depresses the CLOSE pushbutton for 1B33-F023B, and the valve should indicate shut, green light "ON", and red light "OFF".

Cue:

- Comments:
1. It will take two minutes to fully close this valve.
 2. The annunciator "RECIRC MTR B LS AUTO XFER CKT NA" will alarm when 1B33-F023B closes.

SAT	UNSAT	Comment Number
-----	-------	----------------

9 8.2.4.5

Notify Chemistry that the RR loop will be isolated.

Coordinate with Chemistry to establish normal water chemistry limits for power operation before fully isolating the loop due to possible high conductivity intrusion (i.e., isolating the idle loop prior to power accession).

Standard: The operator reminds the CRS to contact Chemistry concerning chemistry limits.

Cue: As the CRS, acknowledge the reminder.

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: 014202J001

REVISION: 06

10 8.2.4.6 WHEN the idle RR loop has depressurized to ~ Drywell pressure, Isolate CRD Seal Injection Flow

Standard: Waits for idle RR loop to depressurize via the blown Recirculation Pump seals.

Cue:

Comments: State actions will be done once conditions are satisfied, and will be turned over to our relief

SAT UNSAT Comment Number

11 8.2.4.7 If the loop is to remain isolated in MODEs 1, 2 or 3, record the date & time of isolation in the Clinton Narrative Log & notify NSED - ECCS & Reactivity Systems Team.

Standard: record the date & time of isolation in the Clinton Narrative Log & notify NSED - ECCS & Reactivity Systems Team

Cue: As the CRS, state that the B RO will perform this actions.

Comments:

SAT UNSAT Comment Number

TERMINATING CUES:

Reactor Recirculation Pump B is shutdown with the loop isolated, waiting for idle RR loop to depressurize.

STOP TIME: _____

K/A REFERENCE NUMBERS			
K/A System Number	K/A Number	Importance Rating	
		RO	SRO
202001	A4.01	3.7	3.7
	A4.02	3.5	3.4
	A4.05	3.3	3.3

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014202J001

REVISION: 06

INITIATING CUE

The plant is operating at 100 % power. The Reactor Recirculation Pump "B" outer seal has failed and the inner seal is failing. The CRS has directed you to perform an Emergency Shutdown and isolation of the "B" Reactor Recirculation Loop. Report when you have completed the task.

NRC SUBMITTAL COPY

CLINTON POWER STATION**Job Performance Measure**

JPM Number: B.1.b.2

Revision Number: 06

Date: 04/12/2002

Developed By:	<u>C Ware</u>	<u>4/12/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/6/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/22/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J011

REVISION: 06

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 – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J011

REVISION: 06

Revision Record (Summary)

Revision	Date	Description
00	Unknown	Unknown
01	Unknown	Unknown
02	Unknown	Unknown
03	Unknown	Unknown
04	Unknown	Unknown
05	12/13/2001	JPM updated to new Exelon format.
06	04/12/2002	Revised due to procedure changes.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER:

015200J011

REVISION: 06

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert.

JPM Title: Defeating the Low RCIC Steam Supply Pressure Isolation Interlock
per CPS No. 4410.00C001

JPM Number: 015200J011

Revision Number: 06

Task Number and Title: 015200C607 / Defeating the Low RCIC Steam Supply Pressure
Isolation Interlock per CPS 4410.00C001

K/A Number 217000.A2.02

Importance 3.8 / 3.7

Suggested Testing Environment: Control Room

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☒ Simulate ☐ Perform
Alternate Path / Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 5 minutes

Actual Time Used: _____ minutes

References: CPS 4410.00, Defeating System Interlocks
CPS 4410.00C001, Defeating RCIC Interlocks

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J011

REVISION: 06

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:

- The Low RCIC Steam Supply Pressure Interlock is defeated.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

EOP Tool Bag

PROCEDURAL/REFERENCES:

CPS 4410.00, Defeating System Interlocks
CPS 4410.00C001, Defeating RCIC Interlocks

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

Defeat the Low RCIC Steam Supply Pressure Isolation Interlock per CPS 4410.00C001 c.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J011

REVISION: 06

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 4410.00, Defeating System Interlocks

3.3 Defeating Low RCIC Steam Supply Pressure Isolation

***1 3.3.1**

Div 1: 1H13-P661

At panel 1H13-P661, Bay D, Row A16, Card 13 (RCIC, E31-N685A), ATM Trip Circuit 1, turn the SET adjustment screw CLOCKWISE 26 full turns.

Standard:

Correct location is identified.

Correct set adjustment screw located.

Set adjustment screw is simulated turned clockwise 26 turns.

Cue:

As examinee performs each task reply:

- On the SET adjust screw
- Turning in direction
- (after demonstrating or stating he would perform 26 full turns state: 26 full turns completed

Comments:

SAT

UNSAT

Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J011

REVISION: 06

*2 3.3.2

Div 2: 1H13-P662

At panel 1H13-P662, Bay B, Row A15, Card 13 (RCIC, E31-N685B), ATM Trip Circuit 1, turn the SET adjustment screw CLOCKWISE 26 full turns.

Standard:

Correct location is identified.

Correct set adjustment screw located.

Set adjustment screw is simulated turned clockwise 26 turns.

Cue:

As examinee performs each task reply:

- On the SET adjust screw
- Turning in direction
- (after demonstrating or stating he would perform 26 full turns state: 26 full turns completed

Comments:

SAT

UNSAT

Comment Number

TERMINATING CUES:

The Low RCIC Steam Supply Pressure Isolation Interlock has been defeated per CPS 4410.00C001.

STOP TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J011

REVISION: 06

K/A REFERENCE NUMBERS			
K/A System Number	K/A Number	Importance Rating	
		RO	SRO
217000	A2.02	3.8	3.7

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER:

015200J011

REVISION: 06

INITIATING CUE

Defeat the Low RCIC Steam Supply Pressure Isolation Interlock per CPS 4410.00C001 Defeating RCIC Interlocks.

CLINTON POWER STATION**Job Performance Measure**

JPM Number: B.1.c.2

Revision Number: 04

Date: 04/12/2002

Developed By:	<u>C. Ware</u>	<u>4/12/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/4/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/6/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/22/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

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 – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

Revision Record (Summary)

Revision	Date	Description
00	Unknown	Unknown
01	Unknown	Unknown
02	Unknown	Unknown
03	08/02/2001	JPM updated to new Exelon format.
04	04/12/2002	Revised due to procedure changes.

CLINTON POWER STATION

SYSTEM JPM

JPM NUMBER: 011259J001REVISION: 04

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☒ SRO Cert.JPM Title: Transfer Control of Feed Reg. Valve 1FW004 to Startup Level
Controller per CPS 3103.01

JPM Number: 011259J001

Revision Number: 04

Task Number and Title: 011259C501, Transfer Control of Feed Reg. Valve 1FW004 to Startup
Level Controller per CPS 3103.01

K/A Number 259002 A4.03 Importance 3.8 / 3.6

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control RoomTesting Method: ☐ Simulate ☒ Perform Alternate Path / Faulted: ☐ Yes ☒ NoTime Critical: ☐ Yes ☒ NoEstimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References: CPS 3103.01, Feedwater (FW)

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ NoThe operator's performance was evaluated against the standards contained in this JPM, and has
been determined to be: ☐ Satisfactory ☐ UnsatisfactoryComments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

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 IC where level is controlled by the FRV, 1FW004. Place 1C34-R601C in manual control of 1FW004 and set the output to control level in the normal band. Select TURB 1A (non-operating feed pump) on the RFP START MODE ACTUATOR SELECTOR SWITCH.

TASK STANDARDS:

- Control of the FRV, 1FW004 has been transferred to the Startup Level Controller in Automatic.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 3103.01, Feedwater (FW)

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps. During the conduct of this JPM the applicant needs to manually control RPV level in the normal band.

INITIAL CONDITIONS AND INITIATING CUE:

A power ascension is in progress with the Feed Regulating Valve (FRV), 1FW004 controlled in manual on the RFP C Flow Controller. Transfer control of FRV 1FW004 to the Startup Level Controller in automatic per CPS 3103.01, Feedwater. Start at step 8.1.5.2.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

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

8.1.5 Placing the Startup Level Controller in Operation

2 Verify/Place the S.U. Level Controller in manual.

Standard: Verifies/Places the S.U. Level Controller in manual and verifies that the amber light is ON for 1C34-R602.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

3 Verify RFP Start Mode Actuator Selector Switch is selected to a non-operating RFP.

Standard: Verifies RFP Start Mode Actuator Selector Switch is selected to a non-operating RFP.

Cue:

Comments: Simulator setup places RFP Start Mode Actuator Selector Switch in TURB 1A (a non-operating RFP).

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

4

Place/Verify the RFP Flow Controllers, **NOT** selected in step 8.1.5.3, in manual.

Standard: Places/Verifies the RFP Flow Controllers, 1C34-R601A, B, and C are in manual.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

5

Adjust the S.U. Level Controller % output to match the RFP Flow Controller % output.

Standard: Adjusts the S.U. Level Controller % output to match the RFP Flow Controller % output.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

*6

Using the RFP Start Mode Actuator Selector Switch, select the **VALVE** pushbutton.

Standard: Selects VALVE on the Start Mode Actuator Selector Switch, verifies that the amber light is ON for 1C34-R601A, and verifies that the amber light is OFF for 1C34-R601C.

Cue:

Comments: The following annunciators clear when 1FW004 is selected to the S.U. Level Controller.

- RFPT A OFF
- RFPT CONT SIG FAILURE

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

7

IF the 1FW004 valve was inadvertently moved in the previous steps, THEN restore the 1FW004 valve to the desired position using the RFP 1C controller.

Standard: If necessary, restores the 1FW004 valve to the desired position using the RFP 1C controller.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

*8

Null and place the S.U. Level Controller in automatic by adjusting the thumb-wheel until the Input pointer is at the setpoint, then press AUTO pushbutton.

Standard: Nulls and places the S.U. Level Controller in automatic by adjusting the thumb-wheel until the Input pointer is at the setpoint, then presses AUTO pushbutton (nulling the controller is not critical to this step). Verifies that the Green light is ON for 1C34-R602.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

9

Adjust the S.U. Level Controller setpoint to 35 inches.

Standard: Adjusts the S.U. Level Controller to 35 inches.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

TERMINATING CUES:

FRV 1FW004 is being controlled by the Startup Level Controller in automatic.

STOP TIME: _____

K/A REFERENCE NUMBERS			
<u>K/A System Number</u>	<u>K/A Number</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
259002	A4.03	3.8	3.6

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J001

REVISION: 04

INITIATING CUE

A power ascension is in progress with the Feed Regulating Valve (FRV), 1FW004 controlled in manual on the RFP C Flow Controller. Transfer control of FRV 1FW004 to the Startup Level Controller in automatic per CPS 3103.01, Feedwater. Start at step 8.1.5.2.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.d.2

Revision Number: 02

Date: 04/22/2002

Developed By: Paul M. Higginbotham 4/22/02
Instructor Date

Validated By: T Pickley 5/5/02
SME or Instructor Date

Review By: P. O'Brien 5/10/02
Operations Representative Date

Approved By: B. Price 5/22/02
Training Department Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

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 (*).
- _____ 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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

Revision Record (Summary)

1. **Revision 01,** JPM updated to new Exelon format.
2. **Revision 02,** Updated to Revision 24b of CPS 3501.01.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Transferring 4160V Bus 1B1 from the Main to the Reserve Source IAW CPS 3501.01

JPM Number: 011262J002

Revision Number: 01

Task Number and Title: 350101.18, Complete Control Room Actions to Energize 4160V Bus 1A1,
1AP07E, (1B1, 1AP09E) [1C1, 1E22-S004]

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Alternate Path/Faulted: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 6 minutes

Actual Time Used: _____ minutes

References: CPS 3501.01, HIGH VOLTAGE AUXILIARY POWER SYSTEM,
Revision 24b, Step 8.1.8

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

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.

SIMULATOR SET-UP CONDITIONS:

Any IC in which the RAT and ERAT are available and the Main TG is off line.
Insert Override 4160V Bus 1B1 RES BKR 1AP09EC to "Flag_A_Trip" (TRUE)
Simulator Operator prepared to Main Breaker.

TASK STANDARDS:

- Operator actions performed per CPS No. 3501.01, step 8.1.8.
- Identified failure of ERAT breaker to close and action taken to prevent tripping RAT breaker.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3501.01, HIGH VOLTAGE AUXILIARY POWER SYSTEM, Rev. 24b, Step 8.1.8

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: 011262J002

REVISION: 02

INITIAL CONDITIONS: 100% Power

INITIATING CUE

(Note to Examiner: Ensure Simulator Operator is positioned to trip the Main Breaker if reserve breaker switch is released before Sync Scope is taken to off.)

CPS 9080.01, DIESEL GENERATOR 1A (B) OPERABILITY, is scheduled to be performed on the Division II Diesel Generator. In support of this the Control Room Supervisor has directed you to transfer 4160V bus 1B1 from the RAT to the ERAT per CPS 3501.01, HIGH VOLTAGE AUXILIARY POWER SYSTEM. Report when the task is complete.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** 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

***2.** Place the 4160V BUS 1B1 RES BKR SYNC keylock switch to the 'ON' position.

STANDARD: 4160V BUS 1B1 RES BKR SYNC keylock switch is placed in the "ON" position.

CUE:

COMMENTS: When operating the Auxiliary Power System, the operator must ensure that only one Sync Selector Switch per Synchroscope is placed ON at a time. Failure to do this can result in equipment damage. (Precaution 4.1)

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

3. For 4160V Safety Related Bus 1A1 (1B1) (1C1) transfer:

As time and resources permit, prior to transfer:

Attempt to adjust 4160V Bus Incoming Voltage within 4084 - 4300V per
section(s) 8.3.1/2.

STANDARD: Operator verifies that voltage is between 4084 - 4300V on 4160V BUS 1B1
INCOMING VOLTAGE meter.

CUE:

COMMENTS:

SAT

UNSAT

Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

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

STANDARD: Synchroscope steady at ~ the 12 o'clock position.

CUE:

COMMENTS: The operator shall verify voltage and synchronization per Precaution 4.2.
"When closing any 6900V or 4160V breaker on an energized bus, synchronization and voltage match must be verified to prevent equipment damage."

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

***6. Close the Bus Res Bkr, and hold in close position**

Determine Bus Res Bkr did not close via:

- **No Closed indication on the Res Bkr, and**
- **No load shift is indicated on the bus load meters.**

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

STANDARD: 4160V BUS 1B1 RES BKR 1AP09EC switch is taken to the "CLOSED" position and held until the operator verifies that the breaker did not close and there was no load shift.

The operator places the 4160V Bus 1B1 RES BKR SYNC switch to OFF prior to releasing the breaker switch to AUTO.

CUE: As the CRS, acknowledge the report from the operator of the failure to transfer.

COMMENTS: The operator should recognize the failure of the breaker to close and therefore performs alternate action which is to turn the synchroscope switch to OFF prior to releasing the breaker switch.

SAT _____ UNSAT _____ Comment Number _____

TERMINATING CUE:

The 4160V bus 1B1 is still on the RAT and the CRS has been informed of the problem.

STOP TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
262001	A1.02	3.1	3.5
	A4.01	3.4	3.7
	A4.02	3.4	3.4
	A4.03	3.2	3.4
	A4.04	3.6	3.7
	A4.05	3.3	3.3

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011262J002

REVISION: 02

INITIATING CUE

CPS 9080.01, DIESEL GENERATOR 1A (B) OPERABILITY, is scheduled to be performed on the Division II Diesel Generator. In support of this the Control Room Supervisor has directed you to transfer 4160V bus 1B1 from the RAT to the ERAT per CPS 3501.01, HIGH VOLTAGE AUXILIARY POWER SYSTEM. Report when the task is complete.

CLINTON POWER STATION**Job Performance Measure**

JPM Number: B.1.e.2

Revision Number: 03

Date: 08/02/2001

Developed By:	<u>Terry Mayfield</u>	<u>8/2/01</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/6/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/22/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 03

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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 02

Revision Record (Summary)

1. **Revision 02,** JPM Updated to new Exelon format
2. **Revision 03,** Incorporate comments.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 02

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐

SRO Cert

JPM Title: Bypass a Local Power Range Monitor (LPRM)

JPM Number: 011215J001

Revision Number: 02

Task Number and Title: 011215C525, Bypass a Local Power Range Monitor

Suggested Testing Environment: Main Control Room

Actual Testing Environment: ☐ Simulator ☐ Plant ☐
Control Room

Testing Method: ☒ Simulate
☐ Perform

Faulted: ☐ Yes ☒ No

Alternate Path: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 12 minutes Actual Time Used: _____ minutes

References: CPS No. 3308.01, Local/Avg. Power Range Monitors

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

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:

None

TASK STANDARDS:

LPRM 38-15-C of APRM Channel B is bypassed.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

Assistance from a MCR operator may be needed to unlock panel 1H13-P670

PROCEDURAL/REFERENCES:

CPS No. 3308.01, LOCAL/AVG. POWER RANGE MONITORS

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

The plant is at rated power. The Control Room Supervisor directs you to place LPRM 38-15-C of APRM Channel B in bypass due to a faulty indication. The Reactor Engineer has been notified. The following LPRMs are currently bypassed:

A)	06-23-A	06-15-B	22-23-A	30-15-C	30-39-D
B)	14-07-A	14-39-A	46-39-A	06-31-C	30-31-D
C)	14-15-A	30-07-B	22-15-D	38-31-D	30-23-B
D)	14-15-B	14-31-B	14-07-C	30-23-C	38-39-D

START TIME:

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 02

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** 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

JPM TITLE: Bypass a Local Power Range Monitor (LPRM)

***8.3.1 Turn the LPRM card Mode Switch to "BY".**

STANDARD: Operator determines that there are >2 LPRM inputs per level and >16 LPRM inputs to the channel.
Operator locates LPRM card 38-15-C for APRM channel B in Panel 1H13-P670 and simulates turning the Mode Switch to the "BY" position.

CUE: Switch is in bypass

COMMENTS: File 300, Slot 14

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 02

8.3.2

Verify:

1. The LPRM BYPASSED LED on the associated LPRM string is illuminated on the LPRM section of the full core display.
2. The green OP LED on the LPRM card extinguishes.
3. The UPSCL TRIP and DNSCL TRIP LED's on the associated LPRM card are extinguished.
4. The UPSCALE/DOWNSCALE lights extinguished for the associated LPRM on the full core display.

1

STANDARD: Operator identifies LPRM string 38-15 on full core display.

CUE: When the operator identifies LPRM string 38-15 on full core display and simulates depressing the LPRM BYPASS pushbutton, cue that the GREEN lamp is lit.

2

STANDARD: Operator identifies the OP LED on LPRM card 38-15-C.

CUE: When the operator identifies OP LED lamp, cue that the green lamp is extinguished.

3

STANDARD: Operator identifies the UPSCL TRIP and DNSCL TRIP LED's on LPRM card 38-15-C.

CUE: When the operator identifies the location of the UPSCL TRIP and DNSCL TRIP LED's on LPRM card 38-15-C, cue that the LED's are extinguished.

4

STANDARD: Operator simulates selecting a rod next to LPRM string 38-15 and identifies the location of the UPSCALE/DOWNSCALE lights for LPRM 38-15-C. This is the display on the lower right hand side of the full core display to the left of the "C" LPRM readout.

CUE: Cue that the UPSCALE/DOWNSCALE lights for LPRM 38-15-C are extinguished.

Comments:

SAT

UNSAT

Comments Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 02

8.3.3

Determine Core Thermal Power (CTP) by either:

Process Computer (OD-3),

3D Monicore, or

Manually using CPS 2208.01, CORE THERMAL POWER
DETERMINATION

STANDARD:

Operator simulates requesting an Official 3D Monicore printout by simulating depressing F7 on the 3D Monicore computer.

Using a existing Official 3D Monicore Case, operator locates the % CTP

CUE:

Cue the operator to use 3D Monicore

Cue the operator that the % CTP on the Monicore Case is the same value as actual APRM indicate power.

SAT

UNSAT

Comments Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 02

8.3.4 Compare the CTP and the APRM meter reading.

STANDARD: Operator locates the CORE POWER in percent on the first page of the 3D Monicore Printout. (Top right hand side of the printout under LOAD LINE SUMMARY)

CUE: Cue the operator that the % CTP on the Monicore Case is the same value as actual APRM indicated power.

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

TERMINATING CUES:

LPRM 38-15-C of APRM 'B' is bypassed

STOP TIME: _____

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
215005	A4.04	3.2	3.2

NRC SUBMITTAL COPY

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011215J001

REVISION: 02

INITIATING CUE

CAUTION

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

The Control Room Supervisor directs you to place LPRM 38-15-C of APRM Channel B in bypass due to a faulty indication. The Reactor Engineer has been notified. The following LPRMs are currently bypassed:

A)	06-23-A	06-15-B	22-23-A	30-15-C	30-39-D
B)	14-07-A	14-39-A	46-39-A	06-31-C	30-31-D
C)	14-15-A	30-07-B	22-15-D	38-31-D	30-23-B
D)	14-15-B	14-31-B	14-07-C	30-23-C	38-39-D

CLINTON POWER STATION**Job Performance Measure**

JPM Number: B.1.f.2

Revision Number: 00

Date: 04/19/2002

Developed By: Paul M. Higginbotham

Instructor

4/19/02

Date

Validated By: T Pickley

SME or Instructor

5/5/02

Date

Review By: P. O'Brien

Operations Representative

5/10/02

Date

Approved By: B. Price

Training Department

5/22/02

Date

REVISION: 00

NOTE: All steps of this checklist should be performed upon initial validation. Prior to JPM usage, revalidate JPM using steps 8 through 11 below.

- Date _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f.2

REVISION: 00

Revision Record (Summary)

1. Revision 00, This is a new JPM

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f.2

REVISION: 00

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Standby Gas Treatment (VG) Trips Upon Start

JPM Number: B.1.f.2

Revision Number: 00

Task Number and Title: 331901.04, Complete Control Room Actions to Perform
Manual Initiation of the VG System

K/A Number: 261000.A2.05

Importance 3.0 / 3.1

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform
Alternate Path / Faulted: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References: CPS 3319.01, STANDBY GAS TREATMENT (VG),
Revision 14, Step 8.2.1

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f.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:

Trigger malfunction to trip the 1A VG fan.
Secure VF.

TASK STANDARDS:

Trip of VG fan 1A is reported and VG Train 1B is operating to maintain Secondary Containment control.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 3319.01, STANDBY GAS TREATMENT (VG), Revision 14, Step 8.2.1

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

VF tripped and has been secured. Investigation is under way why VF failure to startup.
Radiation Protection and Chemistry have been notified of intent to start VG.
You are directed to manually initiate the 1A train of Standby Gas Treatment (VG) for Secondary Containment Control per CPS 3319.01, STANDBY GAS TREATMENT.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: **B.1.f.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

***8.2.1.1** Notify Radiation Protection to **verify either OPR03S or OPR04S is in service and operable,**

And

- Notify RP that VG will be manually started.

Standard Verify either OPR03S or OPR04S is in service and operable,

And

- Notify RP that VG will be manually started

CUE Respond as RP that VG will be manually started

Comments Procedure is inaccurate, OPR03S or OPR04S will be checked by the operator on the AR/PR panel
Verify either OPR03S or OPR04S is in service and operable is the critical portion of this step.

SAT UNSAT Comment Number

8.2.1.2 Notify the Chemistry Department after SGTS flow is initiated to perform sampling per CPS No. 9940.01, WEEKLY CHEMISTRY SURVEILLANCE LOG. (ODCM section 3.2.2/TBL 3.4-1 ITEM B)

Standard Notify Chemistry to perform CPS 9940.01 for VG operations

CUE State the B RO will take care of this action

Comments

SAT UNSAT Comment Number

8.2.1.3 Monitor Secondary Containment pressure using 0PDI-VG101 (0PDI-VG001) on PNL 1H13-P801 as needed through the remainder of this section.

Standard Monitors Secondary Containment pressure.

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: **B.1.f.2**

REVISION: **00**

8.2.1.4

Prior to manual VG initiation, manually shutdown and isolate VF using CPS No. 3404.01, FUEL BUILDING HVAC (VF) to prevent tripping on high differential pressure.

Standard

Verifies VF is secured.

CUE

Comments

SAT UNSAT Comment Number

***8.2.1.5**

Place the SGTS train A in service by starting Exhaust Fan, 0VG02CA and verify the following automatic actions:

Standard

Starts SGTS Train A Exhaust Fan.
Reports SGTS Train A Exhaust Fan tripped.

CUE

If asked as the CRS, What do you recommend for action to recover secondary containment differential pressure?
Examinee recommends startup of the B VG train
Direct starting SGTS Train B.

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f.2

REVISION: 00

*8.2.1.5

Place the SGTS train B in service by starting Exhaust Fan, 0VG02CB and verify the following automatic actions:

- a) 1VG17YB, Fuel Bldg Exh Outbd Isol Dmpr closes
- b) 1VG16YB, Fuel Bldg Exh Outbd Isol Dmpr closes
- c) 1VG04YB, SGTS TRN B Pmp Rms Suction Damper opens
(1VG04YB is normally open)
- d) 1VG05YB, SGTS TRN B Fuel Bldg Suct Dmpr opens
- e) 1VG06YB, SGTS TRN B ECCS Rms Suct Dmpr opens
- f) 1VG02YB, SGTS TRN B Fuel Bldg Isol Dmpr opens
- g) 0VG01YB, SGTS TRN B Inlet Damper opens (modulates)
- h) SGTS TRN B Htr, 0VG04AB energizes
- i) 0VG02YB, SGTS TRN B Exh Fan 2CB Dmpr opens
- j) 0VG05YB, SGTS TRN B Exhaust Fan (Stack) Dmpr opens

Standard

Starts Exhaust Fan, 0VG02CA and verifies by status indicating lights:

- a) 1VG17YB, Fuel Bldg Exh Outbd Isol Dmpr closes
- b) 1VG16YB, Fuel Bldg Exh Outbd Isol Dmpr closes
- c) 1VG04YB, SGTS TRN B Pmp Rms Suction Damper opens
(1VG04YB is normally open)
- d) 1VG05YB, SGTS TRN B Fuel Bldg Suct Dmpr opens
- e) 1VG06YB, SGTS TRN B ECCS Rms Suct Dmpr opens
- f) 1VG02YB, SGTS TRN B Fuel Bldg Isol Dmpr opens
- g) 0VG01YB, SGTS TRN B Inlet Damper opens (modulates)
- h) SGTS TRN B Htr, 0VG04AB energizes
- i) 0VG02YB, SGTS TRN B Exh Fan 2CB Dmpr opens
- j) 0VG05YB, SGTS TRN B Exhaust Fan (Stack) Dmpr opens

Directs NLO to locally verify SGTS Room Fan 0VG05CB started.

CUE

AS NLO report SGTS Room Fan 0VG05CB started.

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f.2

REVISION: 00

TERMINATING CUES:

SGTS Train B is operating to maintain Secondary Containment integrity.

STOP TIME: _____

K/A REFERENCE NUMBERS

K/A SYSTEM NUMBER
261000

K/A NUMBER
A2.05

RO
3.0

SRO
3.1

Importance Rating

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f.2

REVISION: 00

INITIATING CUE

VF tripped and has been secured. Investigation is under way why VF failure to startup.
Radiation Protection and Chemistry have been notified of intent to start VG.

You are directed to manually initiate the 1A train of Standby Gas Treatment (VG) for Secondary
Containment Control per CPS 3319.01, STANDBY GAS TREATMENT.

CLINTON POWER STATION**Job Performance Measure**

JPM Number: B.1.g.2

Revision Number: 00

Date: 04/22/2002

Developed By: Paul M. Higginbotham
Instructor

4/22/02
Date

Validated By: T Pickley
SME or Instructor

5/5/02
Date

Review By: P. O'Brien
Operations Representative

5/6/02
Date

Approved By: B. Price
Training Department

5/22/02
Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.2

REVISION: 00

Revision Record (Summary)

1. Revision 00, This is a new JPM

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.2

REVISION: 00

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Initiate ADS With Loss of Normal Instrument Air, Transfer to Alternate Source

JPM Number: RO B.1.g.2

Revision Number: 00

Task Number and Title: 310101.07, Complete Control Room Actions to Perform ADS Initiation (Auto / Manual)

K/A Number: 218000.A2.03

Importance 3.4 / 3.6

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform
Alternate Path / Faulted: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 10 minutes Actual Time Used: _____ minutes

References: CPS 3101.01, MAIN STEAM (MS, IS & ADS), Steps 8.2.2 and 8.2.3

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.2

REVISION: 00

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.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:

Initialize to a full power IC. Initiate a Group 1 Isolation and stabilize RPV parameters. Initiate a break in the IA header to the Drywell to remove IA from the SRV operators. Use the SRV accumulator leak malfunctions to depressurize the ADS valve accumulators and the mixing compressors to maintain drywell pressure less than 1.68 psig.

This setup may be snapshot into a temporary IC for use with this JPM.

TASK STANDARDS:

ADS is manually initiated and SRVs open by placing the ADS Backup Air Bottles are On Service.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 3101.01, MAIN STEAM (MS, IS & ADS), Steps 8.2.2 and 8.2.3

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

With all MSIVs closed.

The Control Room Supervisor has directed you to manually initiate ADS per CPS 3101.01, MAIN STEAM.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.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

3101.01

1. 8.2.2.1 Observe SRV/ADS limitations in section 6.3 (page 6).

Standard Examinee refers to and observes SRV/ADS limitations during performance of this procedure.

CUE

Comments Limitations address SP parameters, SRV cycle order and frequency, Placing Div. 1 and Div. 2 SRV control switches to OFF when IA is lost.
The examinee may transfer the ADS valves to the Backup Air Bottles before performing Steps 1 and 2.

SAT UNSAT Comment Number

2. 8.2.2.2 Sound the CNMT evacuation alarm.

Standard Examinee activates the Containment evacuation alarm.

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.2

REVISION: 00

*3. 8.2.2.3

If ADS has not initiated, manually initiate ADS:

Arm and depress all four ADS Div 1/2 Logic A&E/B&F Initiate push-buttons.

Standard

Rotate collars and depress ADS Div 1, Logic A&E push-buttons
OR

Rotate collars and depress ADS Logic 2 B&F Initiate push-buttons.

CUE

Comments

Logic will initiate if only ADS Div 1 and/or 2 Logic A&E and/or B&F Initiate push-buttons are operated; however, procedure requires all four.

The examinee may transfer the ADS valves to the Backup Air Bottles as the first steps in this JPM.

SAT UNSAT Comment Number

4.

Determine that the ADS Backup Air Bottles must be Placed in Service

Standard

Examinee determines that there is no IA to the ADS valves.

CUE

Comments

This can be determined by:

- A failure of the ADS valves to open
- Annunciator 5067-7L or
- Low pressure indication on the ADS IA pressure meter P601.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.2

REVISION: 00

*5. 8.2.3.1

Placing ADS Backup Air Bottles On Service

Shut 1IA012B, ADS IA CNMT Inbd Isol Vlvs.

Verify 1IA012A, ADS IA CNMT Outbd Isol Vlvs opens.

Standard

Examinee transfers ADS to the Backup Air Bottles:

- Closes 1IA012B, ADS IA CNMT Inbd Isol Vlvs, AND
- Verifies 1IA012A, ADS IA CNMT Outbd Isol Vlvs opens.

CUE

Comments

The examinee may transfer the ADS valves to the Backup Air Bottles as the first steps in this JPM.

SAT UNSAT Comment Number

*6. 8.2.3.2

Shut 1IA013B, ADS IA CNMT Inbd Isol Vlvs.

Verify 1IA013A, ADS IA CNMT Outbd Isol Vlvs opens.

Standard

- Closes 1IA013B, ADS IA CNMT Inbd Isol Vlvs, AND
- Verifies 1IA013A, ADS IA CNMT Outbd Isol Vlvs opens

CUE

Comments

SAT UNSAT Comment Number

7. 8.2.3.3

Verify (1H13-P601, 5067):

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

Standard

At Panel 1H13-P601, examinee verifies:

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

CUE

Comments

SAT UNSAT Comment Number

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: B.1.g.2

REVISION: 00

8. 8.2.2.4

Verify seven ADS valves open using as needed:

- SPDS
- DCS Display 122 (2H) [Acoustic Monitor Input]
- DCS Display 186 (7B) ['A' Solenoid Input]
- 1H13-P601/P642 Solenoid Indicator Lights
- 1H13-P866, Valve Flow Monitor Control Panel
(Channels 2, 4, 6, 9, 11, 13, 16)
- 1H13-P614, ADS Safety Valve Temperature recorder 1B21-R614
(Pts 1 - 7)
- Indirect indication via changes in RPV pressure, RPV level, MSL flows,
& suppression pool temperatures.
-

Standard

Examinee determines all seven ADS Valves are open by using multiple indications of ADS valve(s) open.

CUE

Comments

SAT UNSAT Comment Number

9.

Report to the CRS that all 7 ADS valves are open.

Standard

Examinee reports to the CRS that all 7 ADS valves are open.

CUE

As the CRS, acknowledge the report of all 7 ADS valves open.

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

ADS operating air is transferred to the Backup Air Bottles and ADS is manually initiated.

STOP TIME: _____

K/A REFERENCE NUMBERS

K/A SYSTEM NUMBER

218000

K/A NUMBER

2.03

Importance Rating

RO

3.4

SRO

3.6

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.g.2

REVISION: 00

INITIATING CUE

With all MSIVs closed.

The Control Room Supervisor has directed you to manually initiate ADS per CPS 3101.01,
MAIN STEAM.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.2.a.2

Revision Number: 02

Date: 08/02/2001

Developed By:	<u>Terry Mayfield</u>	<u>8/2/01</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/6/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/22/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

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 (*).
- _____ 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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

REVISION: 02

Revision Record (Summary)

1. **Revision 01,** JPM Updated to new Exelon format
2. **Revision 02,** Incorporating comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

REVISION: 02

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Startup a Hydrogen Recombiner from the Local Control Panel

JPM Number: 015200J082

Revision Number: 02

Task Number and Title: 015200C663, Startup a Hydrogen Recombiner from the Local Control Panel

Suggested Testing Environment: Plant

Actual Testing Environment: ☐ Simulator ☐ Plant ☐
Control Room

Testing Method: ☒ Simulate
☐ Perform

Faulted: ☐ Yes ☒ No

Alternate Path: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 10 minutes Actual Time Used: _____ minutes

References: CPS No. 4411.11, HYDROGEN CONTROL SYSTEM OPERATION,
Section 2.5

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

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:

None

TASK STANDARDS:

Hydrogen Recombiner A is started and has reached operating temperature.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 4411.11, HYDROGEN CONTROL SYSTEM OPERATION, Section 2.5

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

The Main Control Room switch for the A Hydrogen Recombiner is broken.
Start the A Hydrogen Recombiner from its local panel per CPS 4411.11, Section 2.5.

START TIME: _____

JPM NUMBER: 015200J082

REVISION: 01

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** 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

JPM TITLE: Startup A Hydrogen Recombiner from the Local Control Panel

2.5.1 IF CNMT water level is approaching or is ≥ 40 (50) ft, 1' 4" Range 4 (3' 8" Range 3) as indicated on 1LI-CM260/261 (1H13-P601, 5063),

THEN (MCR) Shut 1HG001/4, Unit 1 CGCS CNMT Isol Vlvs.

STANDARD: Operator simulates contacting MCR and requesting that Containment water level.

CUE: As the BCRO, report that containment water level is 19 feet 6 inches.

COMMENTS: No additional action required

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

REVISION: 01

2.5.2 (MCR) Open 1HG001/4, Unit 1 CGCS CNMT Isol Vlvs.

STANDARD: Operator simulates contacting MRC and requesting that 1HG001/4 be OPENED.

CUE: As the BCRO, report that 1HG001/4 are OPEN.

COMMENTS:

SAT _____ UNSAT _____ Comments Number

2.5.3 (MCR) Place CGCS Recomb 1, 0HG01SA control switch in TEST.

STANDARD: Operator simulates contacting MRC and requesting that 0HG01SA be placed in TEST.
After 0HG01SA is put in TEST, operator checks DS-4 at the local panel.

CUE: As the BCRO, report that 0HG01SA is in TEST.
When operator checks DS-4, cue that the GREEN light is illuminated.

COMMENTS:

SAT _____ UNSAT _____ Comments Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

REVISION: 01

***2.5.4 At 0HG01JA, Hydrogen Recombiner local control panel, start CGCS Recombiner, 0HG01SA, by placing 1HS-HG021B HS-1 Start/Stop control switch to ON. (CB 737', AA-130)**

STANDARD: Operator simulates placing 1HS-HG021B, HS-1, in ON.

CUE: Switch is in the ON position. RED light is ON, GREEN light is OFF.

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

***2.5.5 At 0PL47JA, Hyd Recomb Rooms Cooling System Panel: Start Hyd Recomb Rm Clg Fan, 0VG01CA. (CB 702', T-129)**

STANDARD: At 0PL47JA, operator simulates taking control switch for 0VG01CA to START.

CUE: Switch is in START. RED light is ON, GREEN light is OFF.
Cue that approximately 1.5 hours has passed.

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

REVISION: 01

***2.5.6** At 0HG01JA, Hydrogen Recombiner local control panel, verify TIC-4 Reaction Chamber Gas Temp, 1 TIC-HG044: (CB 737', AA-130)

- a) Set to 1325°F, and
- b) Temperature increases to 1325°F.

STANDARD: Operator simulates verifying TIC-4 is set for 1325°F and that temperature increases to 1325°F.

CUE: TIC-4 is set for 1325°F.
Reaction Chamber gas temperature is 1325°F.

COMMENTS: The recombiner takes approximately 1.5 hours to reach its normal operating temperature of 1325°F.

SAT _____ UNSAT _____ Comments Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

REVISION: 01

TERMINATING CUES:

Hydrogen Recombiner A is started and has reached operating temperature.

STOP TIME:

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J082

REVISION: 01

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER

K/A NUMBER

RO

SRO

223001

K3.04

3.3

3.5

K4.04

3.5

3.8

K6.05

3.1

3.3

A2.04

3.7

3.8

INITIATING CUE

CAUTION

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

The Main Control Room switch for the A Hydrogen Recombiner is broken.
Start the A Hydrogen Recombiner from its local panel per CPS 4411.11, Section 2.5.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.2.b.2

Revision Number: 00

Date: 04/23/2002

Developed By:	<u>Paul M. Higginbotham</u>	<u>4/23/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/7/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/22/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.2

REVISION: 00

Revision Record (Summary)

1. Revision 00, This is a new JPM

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.2

REVISION: 00

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: RCIC Startup at the RSD Panel With Flow Controller Failure

JPM Number: B.2.b.2

Revision Number: 00

Task Number and Title: 400301.04, Complete In-Plant Actions to Perform Remote Shutdown Tasks that DO Require MCR Evacuation (licensed task)

K/A Number: 217000.A2.10

Importance 3.1 / 3.1

Suggested Testing Environment: Simulator RSD Panel and Plant

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform
Alternate Path / Faulted: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 20 minutes Actual Time Used: _____ minutes

References: CPS 4003.01C002, RSP – RCIC OPERATION, Revision 2
OP-AA-101-111, ROLES AND RESPONSIBILITIES OF ON-SHIFT PERSONNEL

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.2

REVISION: 00

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.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:

Initialize in a full power IC and insert malfunction to fail the automatic function of the RCIC controller at the Remote Shutdown Panel to 0 flow.

Perform the immediate actions for MCR evacuation.

Establish RPV level low in the normal operating band.

Verify RCIC is not initiated.

Perform CPS 4003.01C002 through Step 5.3.

This setup may be snapshot into a temporary IC for use with this JPM.

TASK STANDARDS:

RCIC is being manually controlled from the Remote Shutdown Panel, controlling RPV level, Level 3 to Level 8.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 4003.01C002, RSP - RCIC OPERATION, Revision 2

OP-AA-101-111, ROLES AND RESPONSIBILITIES OF ON-SHIFT PERSONNEL

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps. Student will perform JPM actions on the simulator and will be required to locate the RSD panel during the inplant walk through.

INITIAL CONDITIONS AND INITIATING CUE:

The Main Control Room has been evacuated. Subsequent actions of CPS 4003.01 have been completed. CPS 4003.01C002 has been performed through Step 5.3.

The CRS directs you to complete the RCIC system startup from the Remote Shutdown Panel and inject to the Reactor Vessel to control RPV water level, Level 3 to Level 8 per CPS 4003.01C002, RSP - RCIC Operation.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.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

CPS 4003.01C002

***1. 5.4** Open 1E51-F046, RCIC Pump Supply To Turb Lube Oil Clr.

Standard Opens 1E51-F046 and verifies RED status light is lit.

CUE

Comments

SAT UNSAT Comment Number

2. 5.5 Verify open 1E51-F077 and F078, RCIC Exh Vac Bkr Outbd (Inbd) Isol Valves.

Standard Verifies 1E51-F077 and F078 are open by observing RED status lights are lit.

CUE

Comments

SAT UNSAT Comment Number

3. 5.6 Start Gland Seal Compressor, 1E51-C002F.

Standard Starts Gland Seal Compressor and verifies RED status light is lit.

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.2

REVISION: 00

4. 5.7 Open 1E51-F019, RCIC Pmp Min Flow Recirc To Suppr Pool.

Standard Opens 1E51-F019 and verifies RED status light is lit.
CUE
Comments

SAT UNSAT Comment Number

*5. 5.8 Open 1E51-F045, RCIC Turb Stm Supp Shutoff Valve.

Standard Opens 1E51-F045 and observes RED status light is lit.
• Monitors RCIC turbine speed on C61-R003.
• Monitors RCIC pump flow on C61-R001-1.
• Determines RCIC turbine pump flow is not rising to the controller setpoint value.
• Reports to SRO

CUE Ask what would you do about this? And direct to take that action:
As SRO direct operator to take manual control of the RCIC Flow Controller

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.2

REVISION: 00

- | | | | |
|----|------|----|--|
| 6. | 5.10 | 1. | Open 1E51-F013, RCIC Pump Disch To Rx Outbd Isol Valve. |
| | | 2. | Shut 1E51-F022 and F059, RCIC Pmp First (Second) Test Valve to Stor Tank. |
| | | 3 | Adjust RCIC Turb Flow Controller, C61-R001 to maintain flow 80 to 700 gpm. |
| | | 4. | Shut 1E51-F019, RCIC Pmp Min Flow Recirc To Suppr Pool. |
| | | 5. | Verify 1VY04C, RCIC Pmp Rm Sply Fan has started. |
| | | 6. | |

Standard

Opens 1E51-F013 to feed the RPV, RED status light lit.
Closes 1E51-F022 and F059, GREEN status lights lit.
Monitors RCIC flow indication and adjusts Controller C61-R001 to maintain 80 to 700 gpm flow.
Closes 1E51-F019, GREEN status light lit.
Verifies RCIC Pmp Rm Sply Fan is running, RED status light lit.

CUE

Comments

- | | SAT | UNSAT | Comment Number |
|----------|-----|-------|--|
| *7. | | | Places controller C61-R001 selector to 'M' (MANUAL). |
| Standard | | | Positions Controller C61-R001 mode selector to the left in 'M' position. |
| CUE | | | |
| Comments | | | OP-AA-101-111 step 4.6.4.7 directs taking manual control |

SAT	UNSAT	Comment Number
-----	-------	----------------

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: B.2.b.2

REVISION: 00

***8. Adjusts controller in MANUAL to raise RCIC turbine speed and pump flow above minimum requirements.**

Standard Adjusts Controller to establish >60 gpm flow and >1500 rpm.

CUE

Comments

SAT UNSAT Comment Number

9. 5.9 While continuing with steps 5.10 or 5.11:
At DC MCC 1A-12A (1DC13E), open circuit #21.

Standard An operator is dispatched to open circuit #21 at DC MCC 1A-12A (1DC13E).

CUE Report as the operator that circuit #21 at DC MCC 1A-12A (1DC13E) is OPEN.

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

RCIC flow to the RPV is being manually controlled at the Remote Shutdown Panel between 80 and 700 gpm.

STOP TIME: _____

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER
217000

K/A NUMBER
A2.10

RO
3.1

SRO
3.1

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.2.b.2

REVISION: 00

INITIATING CUE

The Main Control Room has been evacuated. Subsequent actions of CPS 4003.01 have been completed. CPS 4003.01C002 has been performed through Step 5.3.

The CRS directs you to complete the RCIC system startup from the Remote Shutdown Panel and inject to the Reactor Vessel to control RPV water level, Level 3 to Level 8 per CPS 4003.01C002, RSP - RCIC Operation.

4.6.1. **REPORT** to the Unit Supervisor.

4.6.2. **OPERATE** the plant in accordance with approved procedures, and within the Limiting Conditions for Operation of the Technical Specifications to ensure the reactor is operated in a safe, conservative, and efficient manner at all times.

NOTE: The RO's immediate actions to stabilize the plant during transient conditions take priority over verbalization to the Unit Supervisor. If possible, verbalization should be accomplished to inform the Unit Supervisor of actions being taken.

1. During transient conditions, the RO may perform immediate operator actions of abnormal procedures from memory, while verbalizing actions being taken to the Unit Supervisor.
2. Subsequent actions taken during transient conditions will be based on direction of the Unit Supervisor per the applicable procedure(s).

4.6.3. **MAINTAIN** an active Reactor Operator's license.

4.6.4. One RO on each unit SHALL be designated the Unit RO and SHALL be "at the controls" (as defined by each station).

1. **ENSURE** applicable Technical Specification time clocks are entered and exited and associated action requirement completed as appropriate based on the scope of the work.
2. **MONITOR** the reactor and **ENSURE** reactor operation remains within established bands.
3. **MONITOR** all assigned control room panels, and **NOTIFY** the Unit Supervisor regarding unusual or unexpected conditions.
4. **MAINTAIN** cognizance of the activities and work impacting the unit, and the work of the assist RO(s) assigned to the unit.
5. **COORDINATE** and/or **PERFORM** necessary reactivity changes on the unit during the shift.
6. **SHUTDOWN** the reactor when the RO determines the safety of the reactor is in jeopardy or when operating parameters exceed any of the reactor protection circuit setpoints and automatic shutdown does not occur.
7. Manually **INITIATE** safety systems' automatic actions when operating parameters exceed the systems' automatic initiation setpoints and automatic initiation does not occur.

CLINTON POWER STATION**Job Performance Measure**

JPM Number: B.2.c.2

Revision Number: 05

Date: 04/17/2002

Developed By:	<u>C Ware</u>	<u>4/17/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/7/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/22/02</u>
	Training Department	Date

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 – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

Revision Record (Summary)

Revision	Date	Description
00	Unknown	Unknown
01	Unknown	Unknown
02	Unknown	Unknown
03	Unknown	Unknown
04	Unknown	Unknown
05	04/17/02	This is revision is due to new Exelon format.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert.

JPM Title: Perform WS/FP Cross Tie IAW CPS No. 3213.01

JPM Number: 011286J009

Revision Number: 05

Task Number and Title: 011286C510 / Perform WS/FP Cross Tie IAW CPS No. 3213.01

K/A Number 286000 A1.05 Importance 3.2 / 3.2

Suggested Testing Environment: Plant

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☒ Simulate ☐ Perform
Alternate Path / Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

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

References: CPS 3213.01, Fire Detection and Protection

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

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:

- Operator actions performed per CPS No. 3213.01

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 3213.01, Fire Detection and Protection

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps. Start from either the MCR or Turbine Bldg. 737'. If at the T.B. 737', then need to have a copy of the procedure to give to the operator.

INITIAL CONDITIONS AND INITIATING CUE:

A fire exists in the plant, you have been directed to cross tie the WS System and FP System, due to a loss of the 0FP01PA & B per CPS 3213.01, Fire Detection and Protection.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

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

8.8 Use of WS/FP Crosstie Line as a Backup for 0FP01PA or 0FP01PB.

***1 Open 1FP035 WS/FP Crosstie Isolation Valve.**

Standard: The operator takes the 1FP035 valve to the open position, and reports that the valve is open to the MCR.

Cue: The valve is turning, (if going in the open direction), valve stops (Stem showing), flow noise appears as valve opens. As the MCR, accept operator report.

Comments: 2.1.4 If 0FP01PA and 0FP01PB are not operable then Service Water (WS) may be used as a backup per 8.2.17 and WS pressure raised to at least 144 psig at IPIWS107 in the event of a fire.

Location NW 737' TB (Rising Stem Gate Valve)

Actual name tag on valve "UNIT 1 WS SUPPLY TO FP ISOL"

SAT

UNSAT

Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

2

Isolate SX Divs 1, 2, 3 from WS by Closing/Check Close 1SX014A, B, & C, WS to SX Header Isolations. This can be done by starting 1SX01PA, PB, & PC, SX Pumps, per CPS No. 3211.01, SHUTDOWN SERVICE WATER (SX), if desired.

Standard: MCR will start as needed.

Cue: If asked, as the MCR, SX pumps will be started as needed.

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

3

Raise and maintain WS Header Pressure at or above 144 psig on 1PI-WS107 by performing in any order as needed:

1. Start Standby WS Pumps per CPS No. 3212.01, PLANT SERVICE WATER (WS).

Standard: MCR will perform this step.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

3

Raise and maintain WS Header Pressure at or above 144 psig on 1PI-WS107 by performing in any order as needed:

2 Isolate/Throttle 1WS109/2WS109, WO Chiller Bypass.

Standard: The operator will check the 1WS109/2WS109 valves in the closed position.

Cue: As the MCR, direct the operator to verify and if necessary throttle/close the 1WS109/2WS109 and the 0WS031 to increase pressure. We will have the "E" area operator take care of the 1WS230 valve.

As the MCR accept the report that the 109 valves are locked shut. As the MCR state that the pressure is still not at the proper range, and that the operator is to go to the 0WS031 valve and throttle/close that valve.

Comments: 1WS109 WS HDR ISOL (CB 702' V-129) valve padlocked shut.
2WS109 WS HDR ISOL (CB 702' V-130) valve padlocked shut.
Both valves are butterfly valves with open/closed indication on top.

SAT	UNSAT	Comment Number
-----	-------	----------------

*3

Raise and maintain WS Header Pressure at or above 144 psig on 1PI-WS107 by performing in any order as needed:

4 Isolate/Throttle 0WS031, WS Bypass Around CC Heat Exchanger.

Standard: The operator turns the 0WS031 valve in the close direction, and reports to the MCR.

Cue: The valve is turning if going in the closed direction, then it stops. The operator will also hear flow noise stop as the valve shuts. As the MCR tell the operator that WS pressure is now in the proper range.

Comments: Location - above the Chem. Lab CB 755' Y130, Valve is not locked, valve is upside down with the indicator at the "bottom"

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

TERMINATING CUES:

When the operator has the WS/FP cross tie valve open and the 0WS031, WS Bypass Around CC Heat Exchanger closed, and reported to the MCR.

STOP TIME: _____

K/A REFERENCE NUMBERS			
K/A System Number	K/A Number	Importance Rating	
		RO	SRO
286000	A1.05	3.2	3.2

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011286J009

REVISION: 05

INITIATING CUE

A fire exists in the plant, you have been directed to cross tie the WS System and FP System, due to a loss of the OFP01PA & B per CPS 3213.01, Fire Detection and Protection.

Facility: Clinton Power StationDate of Examination: 7/29/2002Exam Level (circle one): RO / SRO(I) / SRO(U)Operating Test Number: ILT0101-3

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
a. Low Pressure Core Spray: JPM 011209J001, Manually S/D LPCS with Initiation Signal Present, K/A 209001.A4.01, Imp 3.8 / 3.6	D,S,L	4
b. RHR: Suppression Pool Cooling Mode: JPM 011205J010, Place RHR in Suppression Pool Cooling, K/A 219000.A4.01, Imp 3.8 / 3.7	D,S,A	5
c. Reactor Feedwater: JPM 011259J004, Startup the Motor Driven Reactor Feed Pump, K/A 259001.A4.02, Imp 3.9 / 3.7	D,S,L	2
d. Emergency Generator: JPM 011264J002, Parallel DG 1A with Off Site Power, K/A 264000.A4.05, Imp 3.6 / 3.7	D,S	6
e. Main Steam: JPM 014200J005, Reset Group 1 Isolation and Establish Pressure Control Using the MSL Drains, K/A 239001.A4.02, Imp 3.2 / 3.2	D,S,L	3
f. Recirculation: JPM (NEW), Transfer RR Fast to Slow with a Trip of One Recirc Pump, K/A 202001.A2.03, Imp 3.6 / 3.7	N,S,A,L	1
g. Plant Ventilation: JPM 011288J006, Place the Continuous Containment Purge System (CCP) in the Filter Mode (AUTO), K/A 288000.A4.01, Imp 3.1 / 2.9	D,S	9

B.2 Facility Walk-Through

a. Reactor Protection System: JPM 045200J022, Open Reactor Protection System Scram Breakers Outside of the MCR, K/A 295015.AA1.02, Imp 4.0 / 4.2	D,R,L	7
b. Fire Protection: JPM (NEW), 041286J003, Reset of an overspeed and a diesel engine restart to support firefighting Operation, K/A 286000.A4.06, Imp 3.4 / 3.4	N,A	8
c. Safety Relief Valves: JPM 015200J042, Operate a SRV from the Remote Shutdown Panel, K/A 239002.A2.06, Imp 4.1 / 4.3	S,D,A,L	3

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow Power, (R)CA

Facility: Clinton Power StationDate of Examination: 7/29/2002Exam Level (circle one): RO / SRO(I) / **SRO(U)**Operating Test Number: **ILT0101-3**

B.1 Control Room Systems

System / JPM Title	Type Code*	Safety Function
c. Reactor Feedwater: JPM 011259J004, Startup the Motor Driven Reactor Feed Pump, K/A 259001.A4.02, Imp 3.9 / 3.7	D,S,L	2
e. Main Steam: JPM 014200J005, Reset Group 1 Isolation and Establish Pressure Control Using the MSL Drains, K/A 239001.A4.02, Imp 3.2 / 3.2	D,S,L	3
f. Recirculation: JPM (NEW), Transfer RR Fast to Slow with a Trip of One Recirc Pump, K/A 202001.A2.03, Imp 3.6 / 3.7	N,S,A,L	1

B.2 Facility Walk-Through

a. Reactor Protection System: JPM 045200J022, Open Reactor Protection System Scram Breakers Outside of the MCR, K/A 295015.AA1.02, Imp 4.0 / 4.2	D,R,L	7
b. Fire Protection: JPM (NEW), 041286J003, Reset of an overspeed and a diesel engine restart to support firefighting Operation, K/A 286000.A4.06, Imp 3.4 / 3.4	N,A	8

* Type Codes: (D)irect from bank, (M)odified from bank, (N)ew, (A)lternate path, (C)ontrol room, (S)imulator, (L)ow Power, (R)CA

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.a.3

Revision Number: 06

Date: 04/18/2002

Developed By:	<u>Paul M. Higginbotham</u>	<u>4/18/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/7/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/23/02</u>
	Training Department	Date

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

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

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

Revision Record (Summary)

1. **Revision 05** This is revision is due to new Exelon format.
2. **Revision 06** Update setpoints to CPS 3313.01, Revision 14

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Manually Shutdown LPCS With An Initiation Signal Present

JPM Number: 011209J001

Revision Number: 06

Task Number and Title: 331301.05, Manually Shutdown LPCS With An Initiation Signal Present

K/A Number 209001.A4.01 Importance 3.8 / 3.6

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Alternate Path /Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 10 minutes Actual Time Used: _____ minutes

References: CPS No. 3313.01, LOW PRESSURE CORE SPRAY, Step 8.1.6.

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

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:

Initiate to an IC with less than 400 psig reactor pressure. Initiate a LOCA signal by using malfunction MS05A to approximately 1% to cause a high Drywell pressure initiation. Terminate HPCS and LPCI injection by shutting their injection valves.

TASK STANDARDS:

LPCS is shutdown with an initiation signal present.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3313.01, LOW PRESSURE CORE SPRAY, Step 8.1.6.

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

There is a leak in the Drywell causing Hi DW pressure conditions. LPCS is being injected into the Reactor Vessel. Adequate core cooling is assured. Manually shutdown LPCS.

START TIME: _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

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

8.1.6 SHUTDOWN - INITIATION SIGNAL PRESENT

8.1.6.1 During LPCS operation, verify as appropriate that 1E21-F011, LPCS Pump Min Flow Recirc Valve:

Opens whenever LPCS flow is < 875 gpm, and
Shuts whenever LPCS flow is \geq 875 gpm.

STANDARD: Red light ON for 1E21-F011 and green light ON for 1E21-F006, when Min Flow required.

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION

JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

8.1.6.2*Shut 1E21-F005, LPCS To CNMT Outbd Isol Valve.**

STANDARD: The operator takes the switch for 1E21-F005 to the Shut position until the green light is ON for 1E21F005 and the red light is OFF.

CUE:

COMMENTS: The annunciator "LPCS INJECTION VALVE IN MANUAL OVERRIDE" alarms.

SAT _____ UNSAT _____ Comment Number _____

8.1.6.3*Stop LPCS Pump, 1E21-C001.**

STANDARD: The operator takes the LPCS pump switch 1E21-C001 to the OFF position until the green light is ON for LPCS PUMP and the red light is OFF.

CUE:

COMMENTS:

1. The annunciator "LPCS PUMP AUTO START" clears.
2. The annunciators "LPCS PUMP AUTO START FAILURE AND LPCS PUMP IN MANUAL OVERRIDE" alarm.

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

8.1.6.4 Verify LPCS Pmp Rm Sply Fan, 1VY01C, stops.

STANDARD: Green light ON for 1VY01C, (1H13-P800).

CUE:

COMMENTS: If room temperature is 68°F or above, the LPCS Pump Room Supply Fan will not stop until room temperature decreases to 65°F.

SAT _____ UNSAT _____ Comment Number _____

8.1.6.5 When initiation conditions have cleared,
Depress LPCS/LPCI FM RHR A SEAL IN RESET push-button, and note
LPCS/LPCI INITIATION SEAL IN RESET LIGHT is OFF.

STANDARD: White and red lights above LPCS/LPCI FM RHR A SEAL IN RESET pushbutton
are not illuminated.

CUE:

COMMENTS: The white light above the LPCS/LPCI FM RHR A SEAL IN RESET pushbutton
indicates the initiation conditions have NOT cleared, high drywell pressure is still
active.

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

TERMINATING CUES:

LPCS is shutdown with an initiation signal present.

STOP TIME: _____

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
209001	A4.01	3.8	3.6
	A4.03	3.7	3.6
	SG 9	3.9	3.7
	SG 13	3.7	3.7

CLINTON POWER STATION

JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: 011209J001

REVISION: 06

INITIATING CUE

There is a leak in the Drywell causing Hi DW pressure conditions. LPCS is being injected into the Reactor Vessel. Adequate core cooling is assured. Manually shutdown LPCS.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.b.3

Revision Number: 01

Date: 08/02/2001

Developed By:	<u>Carl Leach</u>	<u>8/2/01</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/10/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/23/02</u>
	Training Department	Date

JPM NUMBER: 011264J010

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 (*).

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

Revision Record (Summary)

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J010

REVISION 01

1. Revision 00, This is a new JPM.

2. Revision 01 Incorporating comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J010

REVISION 01

Operator's Name: _____ SS# _____
Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Place RHR A In Suppression Pool Cooling From Standby per CPS No. 3312.01
(Faulted)

JPM Number: 011205J010

Revision Number: 00

Task Number and Title: 011205C544/ Perform Suppression Cooling Operations

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Faulted: ☒ Yes ☐ No
Alternate Path: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 10 minutes **Actual Time Used:** _____ minutes

References: CPS No. 3312.01, RESIDUAL HEAT REMOVAL, Section 8.1.9

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J010

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:

1. An IC with Plant Service Water (WS) supplying Div. I Shutdown Service Water (SX).
2. RHR Loop "A" is in the Standby Mode.
3. Insert Malfunction RH 02A to trip the RHR Pump A when SX82A RHR A HX MU Cond Inlet valve is being shut.

TASK STANDARDS:

RHR A Test Return Valve to Suppression Pool 1E12-F024A is shut after RHR A Pump is tripped.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL REFERENCES:

CPS No. 3312.01, RESIDUAL HEAT REMOVAL, Section 8.1.9

EVALUATOR INSTRUCTIONS:

Amplifying cues may be provided within the JPM steps.

INITIAL CONDITION AND INITIATING CUE:

Place RHR loop "A" in the Suppression Pool Cooling mode to accommodate SRV testing per CPS No. 3312.01, RESIDUAL HEAT REMOVAL.

START TIME: _____

JPM NUMBER: 011264J010

REVISION 01

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** 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 this JPM.

PERFORMANCE STEPS

8.1.9.2 During Pool Cooling Mode, verify as appropriate that
1E12-F064A, RHR Pump A Min Flow Recirc Valve,
Opens whenever RHR flow is < 1100 gpm for > 8 sec, and
Shuts whenever RHR flow is > 1100 gpm.

STANDARD: When RHR Pump A is started, verifies RHR Pump Minimum Flow Recirc Valve
1E12-F064A opens and then closes when RHR Flow is >1100 gpm. (P601 meter)

CUE: None

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

8.1.9.3 To place RHR Loop A in suppression pool cooling:

8.1.9.3.1. Place/verify SX A PRM 1RIX-PR038,
Shutdown Service Water A Effluent (SX) in service

STANDARD: Verifies SXB PRM 1RIX-PR038 Shutdown Service Water A Effluent (SX) in
service by Checking AR/PR Monitor.

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

8.1.9.3.2 Verify WS available to RHR A Hx

STANDARD: Verifies WS available to RHR A HX by ensuring SSWSTR 1A Outlet pressure at
>100 psig on PI-SX028.

CUE: NONE

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

JPM NUMBER: 011264J010

REVISION 01

***8.1.9.3.3. Start RHR Pump A, 1E12-C002A.**

STANDARD: Places RHR Div 1 Test Prep Switch in Test and Starts RHR Pump A

CUE: None

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

***8.1.9.3.4. Open 1E12-F024A, RHR A Test Valve To Suppr Pool**

STANDARD: Opens 1E12-F024A, RHR A Test Valve to Suppr Pool

CUE: None

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

8.1.9.3.5. Verify flow 4550 to 5550 gpm on RHR Pump A Flow Meter, 1E12-R603A.

STANDARD: Verifies flow between 4550 to 5500 gpm on 1E12-R603A (RHR A Flow Meter)

CUE: None

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

8.1.9.3.6. Verify/reposition following valve as follows:

1SX082A RHR A Hx 1A MU Cond Inlet Vlv is shut

STANDARD: Verifies 1SX082A, RHR A Hx 1A Mu Cond Inlet Valve is shut.

CUE: None

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J010

REVISION 01

* **Recognizes RHR Pump A trip**

STANDARD: Recognizes RHR Pump A trip and CLOSES Suppression Pool Test Return Valve 1E12-F024A.

CUE: None

COMMENT: This action comes from:

8.1.9.1 IF RHR Pump A(B) stops,
THEN Shut 1E12-F024A(B), RHR A(B) Test Valve To Suppr Pool.
(system draw down to pool will require fill & vent)

SAT _____ UNSAT _____ Comment Number _____

Reports the RHR A Pump trip to CRS .

STANDARD: Notifies the CRS of A RHR Pump trip

CUE: Inform operator that SRV testing will be postponed.

COMMENTS:

SAT _____ UNSAT _____ Comment Number _____

TERMINATING CUES:

Suppression Pool Test Return Valve for A RHR Loop 1E12-F024A is closed.

STOP TIME: _____

K/A REFERENCE NUMBERS

K/A System Number	K/A Number	Importance Rating	
		RO	SRO
219000 - RHR Suppression Pool	A4.02	3.7*	3.5
219000 Cooling Mode	A4.01	3.8*	3.7*
219000	SG 9	4.2*	3.8*
219000	SG 13	3.9*	3.7

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J010

REVISION 01

INITIATING CUE

Place RHR loop "A" in the Suppression Pool Cooling mode to accommodate SRV testing per
CPS No. 3312.01, RESIDUAL HEAT REMOVAL.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.c.3

Revision Number: 02

Date: 04/18/2002

Developed By:	<u>Paul M. Higginbotham</u>	<u>4/18/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/10/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/23/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

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 (*).
- _____ 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

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: 011259J004

REVISION: 02

Revision Record (Summary)

1. **Revision 01,** JPM updated to new Exelon format.
2. **Revision 02,** Update content to CPS 3103.01, Revision 20b

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

REVISION: 02

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: Startup Motor Driven Reactor Feedwater Pump (MDRFP)

JPM Number: 011259J004

Revision Number: 01

Task Number and Title: 310301.39, Complete Control Room Actions to Perform Motor
Driven Reactor Feedwater Pump Startup

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Alternate Path /Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References: CPS No. 3103.01; FEEDWATER, Section 8.1.3, Rev.20b

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

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.

SIMULATOR SET-UP CONDITIONS:

Initialize to a startup IC with the condensate booster pumps feeding the reactor and the startup level controller in manual, controlling the 1FW004 valve. Raise RPV level to high in the operating band. If an IC with the required conditions does not exist, establish the required conditions and snapshot to a temporary IC location.

TASK STANDARDS:

Reactor Feedwater Pump 'C' is running with Reactor Water Level within the normal operating band.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3103.01, FEEDWATER, Section 8.1.3, Rev. 20b.

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

Reactor power and pressure ascension is in progress as part of a normal reactor startup and are approaching the limit of the condensate booster pumps. All local pre-start checks have been performed and the warming line has been open for 30 minutes. Start the "C" Reactor Feedwater pump, and verify it is capable of injecting into the vessel per CPS 3103.01, Feedwater, Section 8.1.3. Maintain normal Reactor water level of 30" to 39" narrow range.

START TIME: _____

JPM NUMBER: 011259J004

REVISION: 02

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** 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

JPM TITLE: Startup of Reactor Feedwater Pump "C"

8.1.3.1 **IF** The plant has been operating with the MDRFP in standby (prestart checks previously performed) **AND** there is an immediate need to start the MDRFP for injection to the RPV due to a plant transient,

THEN

1. Ensure that all MDRFP trip signals reset (may cause auto start)
2. Start the MDRFP by depressing the MDRFP START pushbutton
3. Dispatch an operator to verify proper MDRFP operation

STANDARD: Reviews step and determines No operator actions required.

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

REVISION: 02

8.1.3.2

Verify the prestart conditions are satisfied.

STANDARD: No operator actions required. Pre-start checks are complete per initial conditions.

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

8.1.3.3 Place/Verify CB Min Flow Valve(s), 1CB011A, B, C, and D in AUTO

STANDARD: Operator verifies 1CB011A, B, C, and D are in AUTO

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

8.1.3.4 IF HI WATER LEVEL TRIP RESET light(s) are lit.
THEN perform the following to reset the Hi Water Level Trip:

- 1.) Place/Verify MDRFP AOP in STOP LOCK.
- 2.) Depress the RX HI WATER LEVEL TRIP RESET button(s).

STANDARD: Operator determine lights not lit and proceeds.

CUE:

COMMENTS: A high Reactor water level condition does not exist in the Simulator setup.

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

REVISION: 02

8.1.3.5 IF feeding the Reactor with CD/CB through FRV 1FW004,
THEN Raise RPV level to high in the control band.

STANDARD: Operator verifies that RPV level is high in the operating band.

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

***8.1.3.6 Verify Close/Close FRV 1FW004, using either the S.U. Level Controller.**

STANDARD: Operator CLOSES 1FW004 using the S. U. Level Controller and verifies GREEN indication for 1FW004 on the DCS screen.

CUE: If requested, direct the operator to use the Startup Level Controller.

COMMENTS: FEEDWATER TURBIDITY HI and FEEDWATER TURBIDITY MON FL LOW will alarm after FRW 1FW004 is closed.

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

REVISION: 02

***8.1.3.7 Start the MDRFP, as follows:**

1. **Depress and hold the STOP pushbutton for the MDRFP.**
2. **Depress and release the RELEASE pushbutton to start RFP 1C Auxiliary Lube Oil Pump 1FW02P.**
3. **After allowing enough time for oil pressure to build up and circulate in the MDRFP (5002-1L Clear),
Release MDRFP STOP pushbutton to start the MDRFP.**
4. **Depress the MDRFP START pushbutton to clear the AUTO START annunciator and enable the AUTO TRIP annunciator for the MDRFP.**

STANDARD: Operator depresses and holds STOP pushbutton for MDRFP.
While holding STOP pushbutton operator depresses START pushbutton for 1FW02P.
Observes RED light ON for 1FW02P (GREEN light lit for RFP 1C).
When annunciator 5002-1L clears, operator releases STOP pushbutton to start MDRFP.
Observes RED light ON for RFP 1C.

CUE:

COMMENTS: Annunciator for low oil pressure (5002-1L) clears in approximately 5 seconds.
Operator should monitor RFP motor amps on the CRT.

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

REVISION: 02

8.1.3.8 Verify RFP 1C Auxiliary Lube Oil Pump 1FW02P stops, as the MDRFP comes up to speed.

STANDARD: Verifies 1FW02P stops, as the MDRFP comes up to speed, by observing GREEN light ON.

CUE:

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

8.1.3.9 Monitor MDRFP Vibration for indication of insufficient minimum flow.
Throttle RFP 1C Min Flow 1FW010C as necessary to minimize pump vibration.
Refer to section 8.1.14 for Operation of RFP Min Flow Valves.

STANDARD: Operator monitors RFP 1C for vibration. Observes RED light ON for 1FW010C.

CUE:

COMMENTS: Operation of the RFP Min Flow Valve will not be necessary.

SAT _____ UNSAT _____ Comments Number _____

JPM NUMBER: 011259J004REVISION: 02***8.1.3.10 Concurrently perform the following as necessary to control RPV injection rate:**

1. Throttle, as necessary, the FRV 1FW004 using the Startup level controller.
2. Throttle/Adjust as necessary the RPV Inlet Vlvs 1B21-F065A and/or 1B21-F065B.
3. As appropriate for plant conditions, place the Startup Level Controller in service per section 8.1.5 (if not already in service) or 8.1.6.

STANDARD: Operator OPENS 1FW004 using the S.U. Level Controller to feed RPV.
Observes discharge flow increase on CRT.

CUE:

COMMENTS: Startup Level Controller is in service per setup conditions, step 1 is the critical action required.

SAT _____ UNSAT _____ Comments Number _____

8.1.3.11 Close/verify closed RFP Bypass Vlv 1FW024.

STANDARD: Operator verifies 1FW024 CLOSED by observing GREEN light ON.

CUE:

COMMENTS: Operator not required to perform this step to meet the task standard for this JPM.
Operator can also observe GREEN light for bypass valve on CRT.

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION

SYSTEM JPM

JPM NUMBER: 011259J004REVISION: 02

8.1.3.12 Close/Verify closed Warming Line Isolation valves 1FW036C and 1FW038C.

STANDARD: Operator directs D area operator to close or verify 1FW036C and 1FW038C closed.

CUE: As D area operator report the warming line isolation valves are CLOSED. (Not simulated)

COMMENTS: Operator not required to perform this step to meet the task standard for this JPM.

SAT _____ UNSAT _____ Comments Number _____

TERMINATING CUES:

Reactor Feedwater Pump 1C is operating and Reactor Water Level is in the normal operating band.

STOP TIME: _____

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
259001	A4.02	3.9	3.7
	A4.05	4.0	3.9
	A4.08	3.3	3.3

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011259J004

REVISION: 02

INITIATING CUE

Reactor power and pressure ascension is in progress as part of a normal reactor startup and are approaching the limit of the condensate booster pumps. All local pre-start checks have been performed and the warming line has been open for 30 minutes. Start the "C" Reactor Feedwater pump, and verify it is capable of injecting into the vessel per CPS 3103.01, Feedwater, Section 8.1.3. Maintain normal Reactor water level of 30" to 39" narrow range.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.d.3

Revision Number: 01

Date: 04/18/2002

Developed By:	<u>Paul M. Higginbotham</u>	<u>4/18/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/7/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/23/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

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 (*).
- _____ 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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

REVISION: 01

Revision Record (Summary)

1. Revision 00, This is a new JPM
2. Revision 01 Change to Exelon format
Update to CPS 3506.01, Revision 28a
Make JPM shorter and more specific to the task

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

REVISION: 01

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Parallel DG 1A With Off Site Power

JPM Number: B.I.d.3

Revision Number: 01

Task Number and Title: 350601.05, Complete Control Room Actions to Perform
Diesel Generator – Offsite Power Parallel Operation

K/A Number 264000.A4.05

Importance 3.6 / 3.7

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Alternate Path /Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 20 minutes Actual Time Used: _____ minutes

References: CPS 3506.01, DIESEL GENERATOR AND SUPPORT SYSTEMS,
Revision 28a, Section 8.1.3

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

REVISION: 01

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments:

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

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:

Initialize to the Temporary IC established for this JPM, OR,
Initialize to any suitable IC with DG in standby, and:

Start Diesel Generator 1A

Transfer 4160 V Bus 1A1 to the RAT

Transfer the remaining 4160 V Buses to the ERAT

Confirm 4160 V RAT load is <15000 HP

Open the Auto Recloser for the in-service (closed) Switchyard breaker (4502 or 4522)

Mark up a copy of CPS 3506.01 through Step 8.1.3.6.4) for use by the examinee in performing this JPM.

TASK STANDARDS:

Diesel Generator 1A is operating in parallel with off-site power with minimum load applied.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3506.01, DIESEL GENERATOR AND SUPPORT SYSTEMS, Section 8.1.3, Rev. 28a.

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

Parallel Diesel Generator 1A with off-site power and apply minimum load of greeter than 500 kW for a maintenance run.

DG 1A was started per CPS 3506.01, Section 8.1.3. and steps are completed through Step 8.1.3.6.4). Begin at Step 8.1.3.7.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

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

8.1.3.7 Place DG 1A Output BKR SYNC switch to ON position.

Standard Inserts Sync Switch control handle and turns the Output BKR SYNC switch to ON

CUE
Comments

SAT UNSAT Comment Number

8.1.3.8 Adjust DG 1A Incoming voltage with DG 1A Generator Voltage Regulator control switch so that Incoming voltage is matched with Running voltage.

Standard Examinee adjusts DG 1A voltage regulator so that incoming voltage is matched with running voltage.

CUE
Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

REVISION: 01

8.1.3.9

Adjust DG 1A speed with DG 1A Governor control switch such that the DG frequency is slightly greater than bus frequency as indicated by:

- 1) CLOCKWISE rotation of the synchroscope at a speed of approximately one revolution every 60-120 sec (i.e., $\frac{1}{2}$ - 1 RPM) or slower.
- 2) Both synchroscope lights are extinguished at the 12 o'clock position.
- 3) Both synchroscope lights are brightly lit at the 6 o'clock position.

Standard

Examinee adjusts DG 1A governor control switch so DG frequency is slightly greater than bus frequency by observing:

- Slow rotation in the clockwise direction
- Both synchroscope lights are extinguished at the 12 o'clock
- Both synchroscope lights are brightly lit at the 6 o'clock

CUE

Comments

SAT UNSAT Comment Number

*8.1.3.10

WHEN the synchroscope's pointer nears the vertical (12 o'clock) position and the synchronizing lamps go dark,

- 1) Close DG 1A Output Bkr.

Standard

When synchroscope pointer nears 12 o'clock, operator takes handswitch for DG 1A output breaker to CLOSE and observes RED light ON.

CUE

Comments

SAT UNSAT Comment Number

*8.1.3.10.2)

Promptly load DG 1A to at least 100 - 200 KW.

Standard

Examinee immediately loads diesel to at least >100 KW by taking governor control switch to RAISE.

CUE

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

REVISION: 01

8.1.3.10.3)

Verify VARs between -500 and +500 KVAR; adjust as necessary.

Standard

Examinee verifies VARs between -500 and +500 KVAR.
Performs adjustments (if necessary) to establish the required KVARs.

CUE
Comments

SAT UNSAT Comment Number

TERMINATING CUES:

DG 1A is synchronized to the grid and minimum load applied (≥ 500 kW).

STOP TIME: _____

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER

K/A NUMBER

RO

SRO

264000

A2.01

3.5

3.6

A4.05

3.6

3.7

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011264J002

REVISION: 01

INITIATING CUE

Parallel Diesel Generator 1A with off-site power and apply minimum load of greeter than 500 kW for a maintenance run.
DG 1A was started per CPS 3506.01, Section 8.1.3. and steps are completed through Step 8.1.3.6.4). Begin at Step 8.1.3.7.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.e.3

Revision Number: 03

Date: 04/18/2002

Developed By:	<u>Paul M. Higginbotham</u>	<u>4/18/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/10/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/23/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

Revision Record (Summary)

1. **Revision 02,** This revision is due to new Exelon format.
2. **Revision 03** This revision is due to revisions of the reference procedures.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Reset a Group 1 Isolation and Establish Pressure Control Using Inboard
Main Steam Line Drains

JPM Number: 014200J005

Revision Number: 03

Task Number and Title: 441109.02, Complete Control Room Action to Perform RPV
Pressure Control Sources Using Abnormal System
Lineup/Operation

K/A Number: 239001.A4.02

Importance 3.2 / 3.2

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
☒ Perform

Alternate Path /Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes Actual Time Used: _____ minutes

References:

CPS No. 4001.02, AUTO ISOLATION, Revision 10, Step 4.9.3

CPS 4001.02C001, AUTOMATIC ISOLATION CHECKLIST, Revision 14

CPS No. 4411.09, EOP RPV PRESSURE CONTROL SOURCES Revision 5,
Step 2.2.1.11

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____

Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

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 hot/pressurized IC with MSIVs open.
- Insert a manual Scram using the Manual Scram Pushbuttons on P680 (Leave the Mode switch in RUN or take it to RUN).
- Lower reactor pressure using Bypass Valves until the Group 1 Isolation occurs.
- Take the Mode Switch to SHUTDOWN.
- Open an SRV as necessary to maintain reactor pressure less than 1000 psig.
- Lineup Auxiliary Steam to the GS header.
- Establish condenser vacuum with a Condenser Vacuum Pump.

TASK STANDARDS:

Group 1 Isolation is RESET and Main Steam Line Drains are Open.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 4001.02, AUTO ISOLATION, Revision 16, Step 4.9.3

CPS 4001.02C001, AUTOMATIC ISOLATION CHECKLIST, Revision 14

CPS No. 4411.09, EOP RPV PRESSURE CONTROL SOURCES, Revision 5, Step 2.2.1.11

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

A Group 1 Isolation occurred due to Low Main Steam Line Pressure when the Reactor Mode Switch was inadvertently left in RUN following a Reactor Scram.

Reset the Group 1 Isolation signal in accordance with CPS No. 4001.02, AUTOMATIC ISOLATION section 4.9.3.

Open the Main Steam Line Inboard Drains in accordance with CPS No. 4411.09, EOP RPV PRESSURE CONTROL SOURCES for pressure control and to start a cooldown.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

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 4001.02, Step 4.9.3.1 Groups 1 - 4, 8, 10, 14 - 16, 19 and part of 20

***4.9.3.1.2** Resetting Isolations NOT caused by HVAC High Rad Signals

1) For the applicable GROUP(s) being reset:

Place the GROUP valve control switches listed in CPS 4001.02C001 annotated with an asterisk (*) to the CLOSE position.

1B21-F022A, Inbd MSIV, C/S

1B21-F022B, Inbd MSIV, C/S

1B21-F022C, Inbd MSIV, C/S

1B21-F022D, Inbd MSIV, C/S

1B21-F028A, Outbd MSIV, C/S

1B21-F028B, Outbd MSIV, C/S

1B21-F028C, Outbd MSIV, C/S

1B21-F028D, Outbd MSIV, C/S

Standard

Places 1B21-F022A-D, Inbd MSIVs, control switches to CLOSE and verifies GREEN light ON for each valve

Places 1B21-F028A-D, Outbd MSIVs, control switches to CLOSE and verifies GREEN light ON for each valve

CUE

Comments

Valves are listed in CPS 4001.02C001.

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

***4.9.3.1.2.2)**

Depress the OUTBD ISOLATION SEAL-IN RESET and INBD ISOLATION SEAL-IN RESET push-buttons.

Standard

Examinee depresses the OUTBD and INBD ISOLATION SEAL-IN RESET push-buttons.

CUE

Comments

SAT UNSAT Comment Number

CPS 4411.09, Step 2.2.1, MAIN STEAM – CONDENSER/BYPASS VALVES/MSL DRAINS

***2.2.1.11**

Main Steam Line Drains

Open following Inboard MSL Inboard Drains as necessary:

- 1B21-F016, MS Drn & MSIV Byp Inbd Isol Valve
- 1B21-F019, MS Drn & MSIV Byp Outbd Isol Valve
- 1B21-F020, MSIV Byp Vlv For MS Line Warm Up
- 1B21-F021, Inbd MSIV Before Seat Warmup Drn Vlv
- 1B21-F033, Inbd MSIV Before Seat Warmup Drn Vlv

Standard

Examinee places the control switch to OPEN and observes the RED light is lit for each of the following MSL Drain valves:

- 1B21-F016, MS Drn & MSIV Byp Inbd Isol Valve
- 1B21-F019, MS Drn & MSIV Byp Outbd Isol Valve
- 1B21-F020, MSIV Byp Vlv For MS Line Warm Up
- 1B21-F021, Inbd MSIV Before Seat Warmup Drn Vlv
- 1B21-F033, Inbd MSIV Before Seat Warmup Drn Vlv

CUE

If asked about opening MSIVs state:
Not at this time.

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

TERMINATING CUES:

Group 1 Isolation is reset and the Main Steam Line Inboard Drains are open.

STOP TIME: _____

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
239001	A4.02	3.2	3.2
223002	A4.03	3.6	3.5
223002	A4.04	3.5	3.6

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 014200J005

REVISION: 03

INITIATING CUE

A Group 1 Isolation occurred due to Low Main Steam Line Pressure when the Reactor Mode Switch was inadvertently left in RUN following a Reactor Scram.

Reset the Group 1 Isolation signal in accordance with CPS No. 4001.02, AUTOMATIC ISOLATION section 4.9.3.

Open the Main Steam Line Inboard Drains in accordance with CPS No. 4411.09, EOP RPV PRESSURE CONTROL SOURCES for pressure control and to start a cooldown.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.f 3

Revision Number: 00

Date: 4/16/2002

Developed By: D Antonelli
Instructor

4/16/02
Date

Validated By: T Pickley
SME or Instructor

5/4/02
Date

Review By: P. O'Brien
Operations Representative

5/10/02
Date

Approved By: B. Price
Training Department

5/23/02
Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f 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.

- _____ 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

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f 3

REVISION: 00

Revision Record (Summary)

1. Revision 00, This is a new JPM
-

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: **B.1.f 3**

REVISION: **00**

Operator's Name: _____

Job Title: ☐ RO ☐ SRO

JPM Title: Transfer RR Fast to Slow with Trip of One Pump

JPM Number: **B.1.f 3**

Revision Number: 00

Task Number and Title: 011202C561 / Transfer Reactor Recirculation Pumps "A" and "B" from Fast Speed to Slow Speed Per CPS No. 3302.01

K/A Number 202001.A2.03, Imp Importance 3.6 / 3.7

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform **Alternate Path / Faulted:** ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes **Actual Time Used:** _____ minutes

References: CPS 3006.01 UNIT SHUTDOWN

CPS 3302.01 REACTOR RECIRCULATION (RR)

CPS 4008.01 ABNORMAL REACTOR COOLANT FLOW

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

Was Immediate Action performed from memory? ☐ 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: B.1.f 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:

Any IC for plant shutdown with the following conditions:

- Approximately 33% Power.
- One TRFP running on SULC in Automatic
- Turbine drains opened per 3006.01 Step 8.2.3

Insert Malfunction RR07A-RECIRC PUMP A INCOMPLETE START SEQUENCE

Select RR107 and RR108 LO TO FAST INT BYPASS; TRUE as PENDING

Select RR109A FCV A MIN POS FOR PUMP UPSHIFT (set for <10%) as PENDING

Select RR109A FCV B MIN POS FOR PUMP UPSHIFT (set for <10%) as PENDING

TASK STANDARDS:

Steps completed for transferring Reactor Recirculation Pumps to Slow Speed. Recognized failure of Pump A to run in Slow. 1B33-F067A Discharge Valve is closed.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

Copy of 3006.01 signed off through Step 8.2.3

PROCEDURAL/REFERENCES:

CPS 3006.01 UNIT SHUTDOWN

CPS 3302.01 REACTOR RECIRCULATION (RR)

CPS 4008.01 ABNORMAL REACTOR COOLANT FLOW

EVALUATOR INSTRUCTIONS:

Ensure that the simulator is stable and all Set-up conditions are completed.

Prepare a copy of 3006.01 signed off through Step 8.2.3

Amplifying cues are provided within the JPM steps.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f 3

REVISION: 00

INITIAL CONDITIONS AND INITIATING CUE:

A plant shutdown is in progress with power at approximately 33% of rated thermal power. One TDRFP is in operation with level control on the Startup Level Controller. 3006.01, UNIT SHUTDOWN, has been completed through step 8.2.3 and is signed off.

As the Reactor Operator you are directed to transfer the Reactor Recirculation Pumps to Slow Speed per CPS 3302.01 REACTOR RECIRCULATION (RR).

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: **B.1.f 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

CPS 3302.01, 8.1.3 RR Pump - Transfer To Slow Speed

1. (Local) At 1B33-P001A and B, LFMG Aux Relay Panel, place following keylock switches to BYPASS:

- A pump: ° S126A, Power Interlock (Both on FB 781' East)
 ° S127A, Total Feedwater Low Flow Interlock
B pump: ° S126B, Power Interlock (Both on FB 781' West)
 ° S127B, Total Feedwater Low Flow Interlock

Standard Request area operator to bypass the FW Flow FCV cavitation / RR pump downshift interlocks at 1B33-P001A and B, LFMG Aux Relay Panel by placing S126A&B and S127A&B in BYPASS.

- CUE
- ACTIVATE RR107 and RR108 LO TO FAST INT BYPASS; TRUE
 - Report as area operator, S126A&B and S127A&B at 1B33-P001A and B, LFMG Aux Relay Panel are in BYPASS; the FW Flow FCV cavitation / RR pump downshift interlocks.

Comments

SAT UNSAT Comment Number

**CLINTON POWER STATION
SYSTEM JPM**

JPM NUMBER: B.1.f 3

REVISION: 00

2. Make the following RR pump transfer notifications:
- 1) Notify RP of potential change in Rad levels.
 - 2) Make a plant wide Gaitronics announcement that the RR pumps will be transferred to slow.

Standard Call RP to notify them of potential Rad level changes
 Makes Gaitronics announcement, Transferring RR Pumps to Slow Speed.

CUE Respond as RP acknowledging notification of changing Rad levels.

Comments

SAT UNSAT Comment Number

- *3. Start both LFMGs by closing LFMG A & B Motor Breakers 1A & 1B.**

Standard Close LFMG A & B Motor Breakers 1A & 1B.

CUE As CRS respond to CRO report of start of LFMGs

Comments

SAT UNSAT Comment Number

- *4. Place both 1B33-F060A & B, Recirc FCVs at ~ 10% position, but not > 10% position.**

Standard Place both 1B33-F060A & B, Recirc FCVs at ~ 10% position, but not > 10% position.

CUE

Comments

ACTIVATE :
 RR109A FCV A MIN POS FOR PUMP UPSHIFT (set for <10%)
 RR109A FCV B MIN POS FOR PUMP UPSHIFT (set for <10%)
 SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f 3

REVISION: 00

- *5. Transfer the RR pumps to the LFMG by depressing both TRANSFER TO LFMG A and B push-buttons simultaneously.

Standard Transfer the RR pumps to the LFMG by depressing both TRANSFER TO LFMG A and B push-buttons simultaneously

CUE As CRS respond to CRO report of transfer to slow speed.

Comments SAT UNSAT Comment Number

6. Observe that the 5A and 5B breakers open and when pump speed decreases, the 2A and 2B breakers close.

Standard Observes that:
The 5A and 5B breakers open and when pump speed decreases the 2 B breaker closes.
The 2A breaker closes and promptly reopens.

CUE Respond as CRS to CRO report.

Comments SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: B.1.f 3

REVISION: 00

CPS 4008.01 ABNORMAL REACTOR COOLANT FLOW
1.7 RR Pump(s) trip from slow speed to off

*3.2

Shut RR Pump 1B33-F067A, Discharge Vlv.

Standard	Takes action to Shut 1B33-F067A, Discharge Valve.
CUE	Respond to report that F067A is being closing. Terminate the JPM.
Comments	This should be performed without initial reference to CPS 4008.01. Examiner should note if this was performed with or without reference to the procedure. Failure to perform it from memory should be evaluated with other competencies rather than failure to complete a critical step.

SAT UNSAT Comment Number

TERMINATING CUES:

RR pumps shifted to slow speed, recognition of the A RR pump failure to shift to slow and taking the action to shut the the 1B33-FO67A, Trminate when the 1B33-F067A is going closed.

If examinee fails to notice the failure of the 2A Pump to start in slow then respond to actions associated with opening the FCVs to 90% and rearming runback interlocks. Then terminate JPM.

STOP TIME: _____

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER
202001

K/A NUMBER
A2.03

RO
3.6

SRO
3.7

INITIATING CUE

A plant shutdown is in progress with power at approximately 33% of rated thermal power. One TDRFP is in operation with level control on the Startup Level Controller. 3006.01, UNIT SHUTDOWN, has been completed through step 8.2.3 and is signed off.

As the Reactor Operator you are directed to transfer the Reactor Recirculation Pumps to Slow Speed per CPS 3302.01 REACTOR RECIRCULATION (RR).

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.1.g.3

Revision Number: 01

Date: 04/17/2002

Developed By:	<u>C Ware</u>	<u>4/17/02</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/10/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/23/02</u>
	Training Department	Date

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 – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

SME / Instructor – Signature / Printed

Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

Revision Record (Summary)

Revision	Date	Description
00	Unknown	Unknown
01	04/17/02	This is revision is due to new Exelon format.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert.

JPM Title: Place the Continuous Containment Purge System (CCP) in the Filtered Mode (Auto)

JPM Number: 011288J006

Revision Number: 01

Task Number and Title: 011288C528 / Place the Continuous Containment Purge System (CCP) in the Filtered Mode (Auto)

K/A Number	288000	A3.01	Importance	3.8 / 3.8
	288000	A4.01	Importance	3.1 / 2.9

Suggested Testing Environment: Simulator

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform
Alternate Path / Faulted: ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 22 minutes Actual Time Used: _____ minutes

References: CPS 3408.01, Containment Building/Drywell HVAC (VR, VQ)

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

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:

Initialize to any suitable IC where CCP (VR/VQ) is operating in the Unfiltered mode.

TASK STANDARDS:

- The CCP system is operating in the Filtered Mode.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

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

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

Place the CCP system in the filtered mode per CPS No. 3408.01, step 8.1.1.2 using the "A" Drywell Purge Train. No automatic isolations affecting VR/VQ have occurred.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

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

8.1.1.2 Startup Continuous Containment Purge Filtered (Auto)

1 8.1.1.2.1 Check that the Containment Building/Drywell HVAC System is stopped per section 8.1.3 or 8.2.2 of this procedure.

Standard: Operator proceeds to section 8.1.3.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

8.1.3 Shutdown Continuous Containment Purge, Unfiltered Mode

2 8.1.3.1.1 At CCP local control panel 1PL17J turn the CCP Heating Coil 1VR05A OFF, if energized.

Standard: Operator directs area operator to turn 1VR05A OFF.

Cue: As the area operator, report that CCP heating Coil 1VR05A is OFF.

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

*3 8.1.3.1.2

Place the CNMT CONTINUOUS PRG MODE switch in NEUTRAL position and observe the following:

- a) CNMT BLDG SPLY OUTBD ISOL VLV, 1VR006A closes.
- b) CNMT BLDG SPLY INBD ISOL VLV, 1VR006B closes.
- c) CNMT BLDG EXH/PRG INBD ISOL VLV, 1VR007B closes.
- d) CNMT BLDG EXH/PRG OUTBD ISOL VLV, 1VR007A closes.
- e) HVAC STACK INLET VLV, 1VR010 closes.
- f) CNMT BLDG SPLY FAN 1VR06CA(1VR06CB) stops and check that CNMT BLDG OUTSIDE AIR SPLY INLT VLV, 1VR005 and CNMT BLDG SPLY FAN ISOL VLV, 1VR004A(1VR004B) close.
- g) CNMT BLDG EXH FAN 1VR07CA(1VR07CB) stops and check that CNMT BLDG EXH FAN ISOL VLV, 1VR009A(1VR009B) closes.

Standard: Operator takes handswitch for CNMT CONTINUOUS PRG MODE to NEUTRAL and observes GREEN light ON for the following valves: 1VR006A/B, 1VR007A/B, 1VR010, 1VR005, 1VR004A/B, and 1VR009A/B.
Operator observes GREEN light ON for the following fans: 1VR06CA/B and 1VR07CA/B.

Cue:

Comments: Verifications not critical

SAT	UNSAT	Comment Number
-----	-------	----------------

4 8.1.3.1.3

Close 1VQ003 DW PRG CNMT EXH INBD ISOL VLV.

Standard: Operator takes handswitch for 1VQ003 to CLOSE and observes GREEN light ON.

Cue:

Comments: This step is not critical since 1VQ003 is reopened in a subsequent step.

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

- 5 8.1.3.1.4 Place control switches for tripped fans in AFTER-STOP to clear auto-trip annunciators.

Standard: Operator takes handswitches for tripped fans to the AFTER-STOP position.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

8.1.1.2 Startup Continuous Containment Purge Filtered (Auto)

- 6 8.1.1.2.2 Verify no isolation signals are present, or reset per section 8.3.1.

Standard: No operator action required since this was part of the initial conditions.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

7 c 8.1.1.2.3

In accordance with CPS ITS SR 3.6.1.3.1, during MODEs 1, 2, and 3, verify the following are closed:

1VR001A CNMT BLDG SPLY OUT BD ISOL VLV,

1VR001B CNMT BLDG SPLY IN BD ISOL VLV,

1VQ004A CNMT BLDG EXH/PRG OUTBD ISOL VLV,

1VQ004B CNMT BLDG EXH/PRG INBD ISOL VLV,

1VR002A CNMT BLDG SPLY OUTBD ISOL BYP VLV,

1VR002B CNMT BLDG SPLY INBD ISOL BYP VLV,

1VQ006A CNMT BLDG EXH OUTBD ISOL BYP VLV,

1VQ006B CNMT BLDG EXH INBD ISOL BYP VLV,

1VQ002 DW PRG INBD ISL VLV,

1VQ005 DW HD PRG EXH ISOL VLV

Document verification in the Reactor Operators Log.

Standard: Operator verifies the following valves CLOSED by observing GREEN light ON for each valve: 1VR001A/B, 1VQ004A/B, 1VR002A/B, 1VQ006A/B, 1VQ002, and 1VQ005.

Operator simulates entry of valve positions in the Reactor Operator Log.

Cue: Extra RO will log

Comments: Actual valve status documentation is not required.

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

- *8 8.1.1.2.4** **Place the control switch for 1VQ003, DW PRG CNMT EXH INBD ISOL VLV in the OPEN position and check that it fully opens. (i.e., green light extinguished at handswitch on 1H13-P800-64C)**

Standard: Operator takes handswitch for 1VQ003 to OPEN and observes RED light ON and GREEN light OFF.

Cue:

Comments: Step need not be performed if 1VQ003 was previously left open. It is critical that 1VQ003 is OPEN.

SAT	UNSAT	Comment Number
-----	-------	----------------

- *9 8.1.1.2.5** **Place one DW PRG EXH FAN, 0VQ02CA or CB control switch in AUTO position.**

Standard: Operator takes handswitch for 0VQ02CA to AUTO.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

- *10 8.1.1.2.6** **Place 1VQ02Y, DW PRG NORM EXH DMPR, to the OPEN position, and verify that it opens.**

Standard: Operator takes handswitch for 1VQ02Y to OPEN and observes RED light ON.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

*11 8.1.1.2.7

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

Standard: Operator takes handswitch for either 1VR06CA or 1VR06CB to LEAD.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

12 8.1.1.2.8

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

Standard: Operator takes handswitch for either 1VR07CA or 1VR07CB to LEAD.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

*13 8.1.1.2.9

Place the CNMT CONTINUOUS PRG MODE switch in FILT position and observe the following:

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

Standard: Operator takes handswitch for CNMT CONTINUOUS PRG MODE to the FILT position and observes RED light ON for the following valves: 1VR006A/B, 1VR007A/B, 1VQ020, 1VR009A/B, 1VR005, 1VR004A/B, 0VQ24YA/B, and 0VQ07YA/B.

Operator observes RED light ON for the following fans: 1VR07CA/B, 1VR06CA/B, 0VQ02CA/B.

Operator observes RED light on for 0VQ05AA/AB.

Cue:

Comments: Verifications not critical, status verification can be performed in any order.

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

14 8.1.1.2.10

If outside temperature is less than 65°F, turn on CCP Heating Coil 1VR05A at CCP local control panel 1PL17J.

Standard: No operator action required.

Cue: Cue the operator that outside air temperature is 75°F.

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

15 8.1.1.2.11

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

Standard: Operator directs an area operator to start 1VR12C.

Cue: As the area operator, report that 1VR12C is ON.

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

16 c 8.1.1.2.12

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

Standard: Operator directs area operator to verify delta-p to be between -0.25 and +0.25 psid.

Cue: As the area operator report that differential pressure is in band.

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

17 c 8.1.1.2.13

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

Standard: Operator observes delta-p to be within acceptable range.

Cue: If requested too check ATM for containment pressure state it is .1 psig.

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

18 8.1.1.2.14

Place control switches for running fans in AFTER-START to clear auto-start annunciators.

Standard: Operator takes handswitches for running fans to AFTER-START position.

Cue:

Comments:

SAT	UNSAT	Comment Number
-----	-------	----------------

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

TERMINATING CUES:

The CCP system is operating in the Filtered Mode.

STOP TIME: _____

K/A REFERENCE NUMBERS			
K/A System Number	K/A Number	Importance Rating	
		RO	SRO
288000	A3.01	3.8	3.8
	A4.01	3.1	2.9

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 011288J006

REVISION: 01

INITIATING CUE

Place the CCP system in the filtered mode per CPS No. 3408.01, step 8.1.1.2 using the "A" Drywell Purge Train.
No automatic isolations affecting VR/VQ have occurred.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.2.a.3

Revision Number: 01

Date: 07/26/2001

Developed By:	<u>Terry Mayfield</u>	<u>7/26/01</u>
	Instructor	Date
Validated By:	<u>T Pickley</u>	<u>5/5/02</u>
	SME or Instructor	Date
Review By:	<u>P. O'Brien</u>	<u>5/6/02</u>
	Operations Representative	Date
Approved By:	<u>B. Price</u>	<u>5/23/02</u>
	Training Department	Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

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 (*).
- _____ 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 _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

REVISION: 01

Revision Record (Summary)

1. Revision 00, New JPM
2. Revision 01, Incorporate comments

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

REVISION: 01

Operator's Name: _____

Job Title: ☐ NLO ☐ RO ☒ SRO ☐ STA ☐ SRO Cert

JPM Title: Open RPS Scram Breakers outside the Main Control Room

JPM Number: 045200J22

Revision Number: 01

Task Number and Title: 045200C524: Open RPS Scram Breakers Outside the Main Control Room

Suggested Testing Environment: Plant

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☒ Simulate

☐ Perform

Faulted: ☐ Yes

☒ No

Alternate Path: ☐ Yes

☒ No

Time Critical: ☐ Yes

☒ No

Estimated Time to Complete: 4 minutes

Actual Time Used: _____ minutes

References: CPS No. 4411.08, Alternate Control Rod Insertion, Rev.5, Step 2.4

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

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. Ensure that the plane of the panel is not crossed.

SIMULATOR SET-UP CONDITIONS:

Not Applicable

TASK STANDARDS:

Simulates scrambling the reactor from outside of the MCR by opening the breakers for the RPS Scram Solenoids.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

A device such as a Laser Pointer for examinee to point to components

PROCEDURAL/REFERENCES:

CPS No. 4411.08, ALTERNATE CONTROL ROD INSERTION, Rev. 5, Step 2.4

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

A reactor scram has occurred but all rods are not at 00.

The MCR is attempting to insert control rods using Alternate Rod Insertion methods.

Deenergize the RPS Scram Solenoids in accordance with CPS No. 4411.08, Alternate Control Rod Insertion, Step 2.4.

Report when the task is complete.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

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

JPM TITLE: Open Reactor Protection System Scram Breakers Outside of the MCR

***2.4.1 (Local) At NSPS 120VAC SOL PWR DIST PNLs A & B, place following breakers to OFF. (CB 802', TB Access Corridor)**

° 1C71-P011A: Brks CB29 through 32.

STANDARD: Operator locates NSPS 120 VAC DIST. PNL. A (C71-P011A) and simulates placing the following breakers in the OFF position:
CB29 CB30 CB31 CB32

CUE: As each breaker is simulated being placed in the OFF position, cue: "The identified component is in the position described."

COMMENTS:

SAT _____ UNSAT _____ Comments Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

REVISION: 00

***2.4.1 (Local) At NSPS 120VAC SOL PWR DIST PNLs A & B, place following
(cont'd) breakers to OFF. (CB 802', TB Access Corridor)**

° 1C71-P011B: Brks CB23 through 26.

STANDARD: Operator locates NSPS 120 VAC DIST. PNL. B (C71-P011B) and simulates placing the following breakers in the OFF position:
CB23 CB24 CB25 CB26.

CUE: As each breaker is simulated being placed in the OFF position, cue: "The identified component is in the position described."

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

Contact the Main Control Room to determine status of control rods.

STANDARD: Main Control Room is contacted by PCS phone or Gaitronics.

CUE: As the B CRO or CRS, cue: "All control rods have fully inserted reclose the scram breakers."

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

REVISION: 00

2.4.2 WHEN Control rods are not moving inward,

THEN Place breaker opened in 2.4.1 to ON.

STANDARD: After receiving cue that all control rods are inserted, operator simulates placing CB29 through CB32 at 1C71-P011A and CB23 through CB26 at 1C71-P011B to ON.

CUE: As each breaker is simulated being placed in the ON position, cue: "The identified component is in the position described."

COMMENTS:

SAT _____ UNSAT _____ Comments Number _____

CLINTON POWER STATION SYSTEM JPM

JPM NUMBER: 045200J022

REVISION: 00

TERMINATING CUES:

The Reactor has been scrammed by opening the breakers for the RPS scram solenoids.

STOP TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

REVISION: 00

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER

295015

295016

K/A NUMBER

AA1.02

AA1.01

AA1.04

RO

4.0

3.8

3.1

SRO

4.2

3.9

3.2

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 045200J022

REVISION: 00

INITIATING CUE

CAUTION

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

A reactor scram has occurred but all rods are not at 00. The MCR is attempting to insert control rods using Alternate Rod Insertion methods. Deenergize the RPS Scram Solenoids in accordance with CPS No. 4411.08, Alternate Control Rod Insertion, Step 2.4. Report when the task is complete.

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.2.b.3

Revision Number: 00

Date: 5/17/02

Developed By: B. Price 5/17/02
Instructor Date

Validated By: R. Kiss 5/17/02
SME or Instructor Date

Review By: P. O'Brien 5/17/02
Operations Representative Date

Approved By: B. Price 5/23/02
Training Department Date

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

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

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

REVISION: 00

Revision Record (Summary)

1. **Revision 03** This is a new JPM.

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

REVISION: 00

Operator's Name: _____ **SS#** _____

Job Title: ☐ NLO ☐ RO ☐ SRO ☐ STA ☐ SRO Cert

JPM Title: 041286J003, Reset of an overspeed and a diesel engine restart to support firefighting Operation

Task Number and Title: 041286C007, 011286C510 / Manual Startup of a Diesel Fire Pump and 321301.01, Complete In-plant Actions to Perform Diesel Fire Pump/Jockey Pump Operation

Suggested Testing Environment: Plant

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate
 ☐ Perform

Faulted: ☐ Yes ☒ No
Alternate Path: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes **Actual Time Used:** _____ minutes

References: CPS No. 3213.01, FIRE DETECTION AND PROTECTION

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ **Date:** _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

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. Ensure that the plane of the panel is not crossed.

SIMULATOR SET-UP CONDITIONS:

Not Applicable.

TASK STANDARDS:

Reset of an overspeed and a diesel fire pump restart to support firefighting Operation per CPS No. 3213.01.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS No. 3213.01, FIRE DETECTION AND PROTECTION

EVALUATOR INSTRUCTIONS:

The A Diesel Fire Pump is selected for this JPM.
Amplifying cues are provided within the JPM steps.

INITIAL CONDITIONS AND INITIATING CUE:

A fire exists in the plant; "B" Diesel Driven Fire Pump started automatically, "A" Diesel Driven Fire Pump has not started and could not be started from the MCR, but is needed to support fire fighting. MCR has not received any alarms on the "A" Diesel Driven Fire Pump.

You are directed by the MCR to startup the Diesel Driven Fire Pump "A" per CPS No. 3213.01, step 8.5.7.2

START TIME: _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

REVISION: 00

PERFORMANCE INFORMATION

Critical steps are denoted with an asterisk (*) to the left of the step number and appear in **BOLD** 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

8.5.7 Start the Diesel Fire Pumps 0FP01PA by one of the following methods.

*** 2. Place Diesel Drive Fire pump "A" local control switch in "Test" position.**

STANDARD: Locates and simulates placing the Diesel Drive Fire pump "A" local control switch into Test position.

CUE:

1. Indicate that the switch is in Test position, the Diesel Driven Fire pump "A" started then shutdown.
2. MCR reports Trouble Diesel Fire Pump A
3. Local Alarm Panel has a ENGINE OVERSPEED alarm light
4. If asked, state that the Diesel Fire pump "A" is needed to support fire fighting.

COMMENTS:

SAT

UNSAT

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

REVISION: 00

8.9 Resetting an Overspeed Trip of a Diesel Fire Pump

CAUTION

If the engine should trip on an overspeed condition, the overspeed switch must be reset by depressing the pushbutton on top of the switch before resetting the controller. Failure to do so will erase the overspeed memory circuit and cause an immediate shutdown of the engine the next time it receives a start signal. Unless there is an emergency, Do Not proceed with this procedure until the cause of the overspeed trip has been determined and corrected.

***1. Reset the overspeed switch by use of the pushbutton on the overspeed switch**

STANDARD: Locates and simulates Resetting the overspeed switch by use of the pushbutton on the overspeed switch

CUE: Switch is depressed, ENGINE OVERSPEED alarm light off. If asked the MCR Trouble Diesel Fire Pump A is still in.

COMMENTS:

SAT _____ UNSAT _____

***2. Place the control switch for Diesel Fire Pump 0FP01PA to OFF**

STANDARD: Locates and simulates placing the control switch for Diesel Fire Pump 0FP01PA to OFF

CUE: Control switch for Diesel Fire Pump 0FP01PA is in OFF

COMMENTS:

SAT _____ UNSAT _____

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

REVISION: 00

3. Place the control switch for Diesel Fire Pump 0FP01PA to AUTO

STANDARD: Place the control switch for Diesel Fire Pump 0FP01PA to AUTO

CUE: Control switch for Diesel Fire Pump 0FP01PA is in AUTO, but does NOT start

COMMENTS: Examine may place this switch to Test to start the engine.

SAT _____ UNSAT _____

8.5.7 Start the Diesel Fire Pumps 0FP01PA by one of the following methods.

***2. Place Diesel Driven Fire pump "A" local control switch in "Test" position.**

STANDARD: Locates and simulates placing the Diesel Drive Fire pump "A" local control switch into Test position.

CUE: Indicate that the switch is in Test position, the Diesel Driven Fire pump "A" started and is running
MCR reports Trouble Diesel Fire Pump A running alarm

COMMENTS:

SAT _____ UNSAT _____

STOP TIME: _____

TERMINATING CUE

Diesel Driven Fire Pump "A" overspeed reset and is started and running.

K/A REFERENCE NUMBERS

<u>K/A SYSTEM NUMBER</u>	<u>K/A NUMBER</u>	<u>Importance Rating</u>	
		<u>RO</u>	<u>SRO</u>
286000	A4.06	3.4	3.4

CLINTON POWER STATION
JOB PERFORMANCE MEASURE WORKSHEET

JPM NUMBER: B.2.b.3/ 041286J003

REVISION: 00

INITIATING CUE

A fire exists in the plant; "B" Diesel Driven Fire Pump started automatically, "A" Diesel Driven Fire Pump has not started and could not be started from the MCR, but is needed to support fire fighting. MCR has not received any alarms on the "A" Diesel Driven Fire Pump.

You are directed by the MCR to startup the Diesel Driven Fire Pump "A" per CPS No. 3213.01, step 8.5.7.2

CLINTON POWER STATION

Job Performance Measure

JPM Number: B.2.c.3

Revision Number: 02

Date: 04/19/2002

Developed By: Paul M. Higginbotham 4/19/02
Instructor Date

Validated By: T Pickley 5/5/02
SME or Instructor Date

Review By: P. O'Brien 5/7/02
Operations Representative Date

Approved By: B. Price 5/23/02
Training Department Date

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

REVISION: 02

Revision Record (Summary)

1. **Revision 01** This revision is due to new Exelon format.
2. **Revision 02** This revision updates to CPS 4003.01 Revision 13 and CPS
 4003.01C001 Revision 0.

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

REVISION: 02

Operator's Name: _____
Job Title: ☐ RO ☐ SRO

JPM Title: Operate a SRV from the Remote Shutdown Panel

JPM Number: 015200J042

Revision Number: 02

Task Number and Title: 400301.04, Complete In Plant Actions to Perform Remote
Shutdown Tasks That DO Require MCR Evacuation
(licensed task)

K/A Number: 239002.A2.06

Importance 4.1 / 4.3

Suggested Testing Environment: Plant and simulator RSDP

Actual Testing Environment: ☐ Simulator ☐ Plant ☐ Control Room

Testing Method: ☐ Simulate ☒ Perform
Alternate Path / Faulted: ☒ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 04 minutes Actual Time Used: _____ minutes

References: CPS 4003.01, REMOTE SHUTDOWN, Revision 13, Step 4.3.d)
CPS 4003.01C001, RSP – PRESSURE CONTROL, Revision 0, Step 4.0

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

REVISION: 02

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____

Evaluator's Signature: _____ Date: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

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.

SIMULATOR SET-UP CONDITIONS:

Any IC at a pressure range of 550-1000 psig that is shutdown and stabilized
Override C61-S10 and C61-HS527 in "Normal" with triggers to delete the override when both switches are placed in "Emergency". Sws Ids:
h_a17_a01_s55_1, h_a17_a01_s43_1
Block annunciators:
5063-6A RSD EMER. TRANS
5066-5B, ADS/SRV Vlv leaking
5067-8L, Sys Monitor Trouble

TASK STANDARDS:

Pressure is lowered using a SRV from the Remote Shutdown Panel.

TOOLS, EQUIPMENT, OTHER SPECIAL REQUIREMENTS:

None

PROCEDURAL/REFERENCES:

CPS 4003.01, REMOTE SHUTDOWN, Revision 13, Step 4.3.d)
CPS 4003.01C001, RSP - PRESSURE CONTROL, Revision 0, Step 4.0

EVALUATOR INSTRUCTIONS:

Amplifying cues are provided within the JPM steps. Student will perform JPM actions on the simulator and will be required to locate the RSD panel during the inplant walk through.

INITIAL CONDITIONS AND INITIATING CUE:

A plant condition has occurred that forced the operating crew to evacuate the MCR and establish control at the Remote Shutdown Panel. Lower reactor pressure to < 600 psig using Safety/Relief Valves from the Remote Shutdown Panel per CPS No. 4003.01, section 4.3.d. Pressure band is 500-600 psig. Other actions of 4003.01 have been or are being performed by other personnel.

START TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

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

4003.01

4.3.d)

Establish RPV Pressure Control below 1065 psig per:
CPS No. 4003.01C001, RSP - Pressure Control.

Standard

Transfers to CPS 4003.01C001 for RPV Pressure Control actions.

CUE

Comments

SAT UNSAT Comment Number

CPS 4003.01C001

4.1

Place to EMERG [*Div 1(2) SRV solenoid control*].

Standard

Places switch C61-S10(C61-HS527) in "EMERG".

Verifies indicating lights for Div. 1(2) SRVs are lit.

Determines transfer switch C61-S10(C61-HS527) has possibly failed and Div. 1(2) SRVs are NOT available for RPV pressure control.

CUE

Switch C61-S10(C61-HS527) is in the "EMERG" position.

Indicating lights for Div. 1(2) SRVs are NOT lit.

Comments

SAT UNSAT Comment Number

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

REVISION: 02

***4.2**

Place C61-HS527(C61-S10) to EMERG [Div 2(1) SRV solenoid control].

Standard

Places switch C61-HS527(C61-S10) in "EMERG".
Verifies indicating lights for Div 2(1) SRVs are lit.

CUE

Comments

SAT UNSAT Comment Number

***4.3**

Control RPV pressure and cooldown by:

Varying RCIC flow rate.

**Operating Div 1 SRV solenoid controls (Preferred) or
Div 2 SRV solenoid controls.**

Standard

Places SRV 1B21-F051C (D or G) control switch to open.
Verifies RED (open) light for the chosen SRV is lit.
Monitors RPV pressure and determines pressure is lowering.

CUE

Comments

SAT UNSAT Comment Number

TERMINATING CUES:

B21C-F051C (D or G) is OPEN at the Remote Shutdown Panel and RPV pressure is lowering.

STOP TIME: _____

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

REVISION: 02

K/A REFERENCE NUMBERS

Importance Rating

K/A SYSTEM NUMBER
239002

K/A NUMBER
A2.06
A4.01

RO
4.1
3.9

SRO
4.3
3.8

CLINTON POWER STATION
SYSTEM JPM

JPM NUMBER: 015200J042

REVISION: 02

INITIATING CUE

A plant condition has occurred that forced the operating crew to evacuate the MCR and establish control at the Remote Shutdown Panel. Lower reactor pressure to < 600 psig using Safety/Relief Valves from the Remote Shutdown Panel per CPS No. 4003.01, section 4.3.d. Pressure band is 500-600 psig. Other actions of 4003.01 have been or are being performed by other personnel.