Exelon Nuclear

Job Performance Measure

Injection of Standby Liquid Control System

JPM Number: S-N-a

Revision Number: 02

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 00 Bank JPM.

Revision 01 Revised to current procedure revision for ILT 06-1 NRC Exam.

Revision 02 Revised to current procedure revision for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 12.

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. Insert following Malfunctions and/or Remotes:

```
# Inserts trip of both SBLC pumps
imf scpmpoca
imf scpmpocb
```

3. Setup the following Triggers:

```
# Event Trigger 1 Activates when SBLC control switch is placed to either BOTH PUMPS position.
trgset 1 "scd301_drw(3)"

# Event Trigger 2 Activates when Trigger 1 is active AND
# SBLC control switch is NOT in either BOTH PUMPS position.
trgset 2 "et_array(1) .and. (.not. scd301_drw(3))"

# Event Trigger 3 Activates when Trigger 2 is active AND
# SBLC control switch is placed to either BOTH PUMPS position.
# Deletes A SBLC pump trip.
trgset 3 "et_array(2) .and. scd301_drw(3)"|2
trg 3 "dmf scpmpoca"|2

# Event Trigger 4 Activates when Trigger 3 is active.
# Deletes B SBLC pump trip.
trgset 4 "et_array(3) .and. scd301_drw(3)"|2
trg 4 "dmf scpmpocb"|2
```

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. The Unit Supervisor has decided that SBLC must be injected for level control.
3. The Unit Supervisor has authorized the use of Hard Cards.

INITIATING CUE

1. The Unit Supervisor has ordered you to inject SBLC, for level control, per the Hard Card.
2. Inform the Unit Supervisor when the task is complete.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* * Denotes critical steps.
* • Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

	PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
	NOTE: Examinee should locate the hard card (DOP 1100-02 attach 1) for injection of SBLC.				
1. *	Place the SBLC INJECTION CONTROL keylock switch to the SYS 1 & 2 OR SYS 2 & 1 position.	Turns the SBLC INJECTION CONTROL keylock switch to either the full right OR full left position.	_____	_____	_____
	NOTE: The A or B SBLC pump breakers tripped on overcurrent and will not start.				
2. *	Verify: • Amber SQUIB A AND SQUIB B pilot lights NOT LIT. • PUMP 1 and PUMP 2 pilot light NOT lit. • FLOW pilot light NOT lit. • SBLC SQUIB VLV CKT FAILURE annunciator alarms (902-5 H-6).	Recognizes SBLC is NOT injecting.	_____	_____	_____
	NOTE: As soon as examinee takes control switch out of initial position, insert trigger 1 to clear overcurrent condition.				
	BEGIN ALTERNATE PATH				
3. *	Places SBLC INJECTION CONTROL keylock switch to opposite position taken to in step 1.	Turns the SBLC INJECTION CONTROL keylock switch to the opposite direction turned in step 1.	_____	_____	_____
4.	Verify: • PUMP 1 and PUMP 2 pilot light lit. • FLOW pilot light lit.	PUMP 1 and PUMP 2 pilot lights now lit.	_____	_____	_____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
5. Verify the following RWCU valves close: • 2-1201-1 • 2-1201-1A • 2-1201-2 • 2-1201-3 • 2-1201-7	Verifies CLOSED indicating lights illuminated for the following: • 2-1201-1 • 2-1201-1A • 2-1201-2 • 2-1201-3 • 2-1201-7	_____	_____	_____
6. Informs Unit Supervisor injecting with SBLC	Examinee notifies the Unit 2 Unit Supervisor	_____	_____	_____
CUE: Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Injection of Standby Liquid Control System
JPM Number: S-N-a Revision Number: 02
Task Number and Title: 211L002, Injection of Standby Liquid Control System

K/A Number and Importance: 211000A4.08 4.2 / 4.2

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☒ Yes ☐ No SRO Only**:** ☐ Yes ☐ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 6 minutes **Actual Time Used:** ____ minutes

References: DOP 1100-02, rev 17

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. The Unit Supervisor has decided that SBLC must be injected for level control.
3. The Unit Supervisor has authorized the use of Hard Cards.

INITIATING CUE

1. The Unit Supervisor has ordered you to inject SBLC, for level control, per the Hard Card.
2. Inform the Unit Supervisor when the task is complete.

Exelon Nuclear

Job Performance Measure

Start the Third Reactor Feed Pump

JPM Number: S-N-b

Revision Number: 00

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 00 New JPM developed for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 14.

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. Ensure “A” and “C” RFP are in operation.
3. Ensure “B” RFP is selected on the RFP Standby Selector switch.
4. Ensure load is between 9.0 Mlbm/hr and 9.8 Mlbm/hr.
5. Ensure RPV water level is ~ 30 inches and stable.
6. Ensure 4 Condensate/Condensate Booster pumps are in operation.
7. Insert following Malfunctions and/or Remotes:
   - None.
8. Setup the following Triggers:
   - None.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Power ascension is in progress and the third RFP needs to be started.
3. The 2B RFP has been pre-heated to the Condensate/Feedwater operating temperature.
4. An NLO is standing by in the Unit 2 RFP room.
5. A REMA is active with appropriate limits for this evolution.
6. TSO (load dispatch) has been notified of this evolution.
7. DOP 3200-03 is complete up to and including step G.11.

INITIATING CUE

1. The Unit Supervisor has directed you to start the 2B RFP in accordance with DOP 3200-03.
2. Inform the Unit Supervisor when the task is complete.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* * Denotes critical steps.
* • Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
NOTE: Provide examinee with a current copy of DOP 3200-03.				
1. Place STBY PP SELECT switch in OFF position.	Rotates switch to OFF.	_____	_____	_____
2. Verify MO 2-3201B, RFP DISCH VLV is CLOSED.	RED indicating light illuminated.	_____	_____	_____
3. Open PCV 2-3201B, 2B RFP RECIRC VLV.	RED indicating light illuminated.	_____	_____	_____
4. Verify Reactor water level is stable.	All RPV water level indicators are stable.	_____	_____	_____
5. Verify Condensate Booster Pumps Discharge header pressure is > 220 psig as indicated by PI 2-3340-50, BOOST PP DISCH PRESS, on Panel 902-6.	PI 2-3340-50 is > 220 psig.	_____	_____	_____
6. Verify RFPs Suction header pressure is > 200 psig as indicated by PI 2-3240-73, RFP SUCT HDR PRESS, on Panel 902-6.	PI 2-3240-73 is > 200 psig.	_____	_____	_____
7. Verify RFPs Ventilation Fan exhaust temperature is < 130°F, as indicated by RFP AIR EXH TEMP on Panel 902-6.	Indicator RFP AIR EXH TEMP is < 130°F.	_____	_____	_____
8. Verify annunciator 902-6 H-8, 2B RFP BRG OIL PRESS LO, alarm is clear.	Annunciator is extinguished.	_____	_____	_____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
9. Verify RFPs Suction header pressure is > 200 psig as indicated by PI 2-3240-73, RFP SUCT HDR PRESS, on Panel 902-6	PI 2-3240-73 is > 200 psig.	_____	_____	_____
* 10. Start 2B RFP by ONE of the following methods: • Place MO 2-3201B, 2B RFP DISCH VLV, control switch to OPEN position. • WHEN double position indication is observed on MO 2-3201B, THEN IMMEDIATELY start 2B RFP. **OR** • Start 2B RFP. • IMMEDIATELY place MO 2-3201B, 2B RFP DISCH VLV, control switch to OPEN position.	Performs EITHER set of actions: • Place MO 2-3201B, 2B RFP DISCH VLV, control switch to OPEN position. • WHEN double position indication is observed on MO 2-3201B, THEN IMMEDIATELY start 2B RFP. **OR** • Start 2B RFP. • IMMEDIATELY place MO 2-3201B, 2B RFP DISCH VLV, control switch to OPEN position.	_____	_____	_____
11. Observe 2B RFP motor current, as indicated by 2B PP AMPS on Panel 902-6.	Amperage meter pegs high, then after several seconds decease so that all three (3) RFP amp meters read the same.	_____	_____	_____
12. Verify Reactor water level is stable.	All RPV water level indicators are stable.	_____	_____	_____
13. Verifies 2B RFP AUX OIL PP auto STOPS.	GREEN indicating light illuminated.	_____	_____	_____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
14. When MO 2-3201B, 2B RFP DISCH VLV, is fully open (the red valve position indicating light is extinguished), then place PCV 2-3201B, 2B RFP RECIRC VLV, control switch in AUTO.	When RED indicating light extinguishes then places PCV 2-3201B, 2B RFP RECIRC VLV, control switch in AUTO position.	_____	_____	_____
15. When RFP flow has stabilized > 1 Mlbm/hr, THEN verify PCV 2-3201B, 2B PP RECIRC VLV, closes.	GREEN indicating light illuminated.	_____	_____	_____
16. Verify the motor current of the operating RFPs are < 1115 amps, as indicated by 2A(B)(C) PP AMPS, on Panel 902-6.	All amp indicators read are < 1115 amps.	_____	_____	_____
CUE: As the NLO, respond that step G.31 has been completed satisfactorily. When asked, respond that step G.33.b is 112°F.				
17. Verify Reactor water level is stable.	All RPV water level indicators are stable.	_____	_____	_____
18. Verify motor currents are < 1115 amps.	All motor currents < 1115 amps.	_____	_____	_____
19. Verify one RFP Ventilation fan is in service.	One RFP Ventilation fan is operating.	_____	_____	_____
20. Verify RFPs suction header pressure is > 200 psig, as indicated by PI 2-3240-73, RFP SUCT HDR PRESS, on Panel 902-6	PI 2-3240-73 is > 200 psig	_____	_____	_____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
21. Verify Cond/Cond Booster Pump motor currents are between 160 and 255 amps, as indicated by 2A(B)(C)(D) PP AMPS, on Panel 902-6.	All amp meters are between 160 and 255 amps.	_____	_____	_____
CUE: If asked, Zinc Injection is in service.				
22. Reports to the Unit 2 Supervisor that the 2B RFP is in operation.	Unit 2 Supervisor notified.	_____	_____	_____
CUE: Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Start The Third Reactor Feed Pump
JPM Number: S-N-b Revision Number: 00
Task Number and Title: 25901LP007, Start a third Reactor Feedwater Pump.

K/A Number and Importance: 259001.A4.02 3.9 / 3.7

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☐ Yes ☒ No SRO Only**:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 25 minutes **Actual Time Used:** ____ minutes

References: DOP 3200-03, rev 47

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Power ascension is in progress and the third RFP needs to be started.
3. The 2B RFP has been pre-heated to the Condensate/Feedwater operating temperature.
4. An NLO is standing by in the Unit 2 RFP room.
5. A REMA is active with appropriate limits for this evolution.
6. TSO (load dispatch) has been notified of this evolution.
7. DOP 3200-03 is complete up to and including step G.11.

INITIATING CUE

1. The Unit Supervisor has directed you to start the 2B RFP in accordance with DOP 3200-03.
2. Inform the Unit Supervisor when the task is complete.

Exelon Nuclear

Job Performance Measure

Isolating one (1) Main Steam Line

JPM Number: S-N-C

Revision Number: 01

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision 00 Bank JPM.

Revision 01 Revised to current procedure revision for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to any IC less than 45% reactor power.

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. DO NOT go into the UNSTABLE region.

3. Per the procedure (DOP 0250-02), power needs to be reduced to at least 50% (power needs to be low enough so that isolating one main steam line will NOT cause a Group I high flow isolation).

4. If using a shutdown IC, verify MO 2-220-4 CLOSED or close the MO 220-4.

REMOTES/ALARMS REQUIRED

1. Override annunciator 902-3 B-2 (Main Steam Line Rad Monitor Downscale) on simulator setup (SA R 203A B 2).

MALFUNCTIONS REQUIRED

None

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.

2. Reactor power has been reduced for Turbine testing.

INITIATING CUE

1. Due to some upcoming maintenance work on the "D" Main Steam Line outboard MSIV, the Unit Supervisor has directed you to ISOLATE the "D" Main Steam Line in accordance with DOP 0250-02.

2. Inform the Unit Supervisor when the task is complete.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* * Denotes critical steps.
* • Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
NOTE: Provide the examinee a copy of DOP 0250-02.				
1. Ensures Reactor power is < 50%.	Reactor power is < 50%.	_____	_____	_____
2. * Close AO 2-203-1D MSIV ("D" MSL inboard MSIV).	RED indicating light illuminated.	_____	_____	_____
3. Verify D STM LINE FLOW indicates less than or equal to 500,000 lbm/hr steam flow panel.	On the 902-5 panel, verifies FI 2-640-23D STM LINE FLOW at less than or equal to 500,000 lbm/hr.	_____	_____	_____
4. * Close AO 2-203-2D ("D" MSL outboard MSIV).	RED indicating light illuminated.	_____	_____	_____
5. Informs Unit Supervisor 'D' Main Steam Line is isolated.	Examinee notifies the Unit 2 Unit Supervisor.	_____	_____	_____
CUE: Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: One (1) Main Steam Line
JPM Number: S-N-c Revision Number: 01
Task Number and Title: 239L003 Isolating One Main Steam Line.

K/A Number and Importance: 239001.A4.01 4.2 / 4.0

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☐ Yes ☒ No SRO Only**:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 7 minutes **Actual Time Used:** ____ minutes

References: DOP 0250-02 rev 12

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.

2. Reactor power has been reduced for Turbine testing.

INITIATING CUE

1. Due to some upcoming maintenance work on the "D" Main Steam Line outboard MSIV, the Unit Supervisor has directed you to ISOLATE the "D" Main Steam Line in accordance with DOP 0250-02.

2. Inform the Unit Supervisor when the task is complete.

Exelon Nuclear

Job Performance Measure

Mitigate high LPCI suction pressure, while lining up LPCI to CST for Injection

JPM Number: S-N-d

Revision Number: 03

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

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Job Performance Measure (JPM)

Revision Record (Summary)

Revision 01	Update JPM to new format.
Revision 02	Revised to current procedure revision.
Revision 03	Revised to current procedure revision for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to any IC.

   NOTE: It is okay to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently. See JPM Set Setup sheet.

2. Verify NO LPCI pumps operating.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. A transient has occurred requiring Alternate Water Injection.

INITIATING CUE

1. The Shift Manager has directed you to line up the 2A LPCI pump suction to the CST and raise RPV water level per DEOP 500-03.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* * Denotes critical steps.
* • Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
NOTE: Provide the Examinee a copy of DEOP 0500-03.				
1. * Place 2A LPCI PP control switch in Pull-to-Lock.	Rotates 2A LPCI PP c/s fully counter-clockwise and pulls up. ALL lights extinguished.	____	____	____
2. * Place PP SUCT VLV MO 2-1501-5A control switch in Manual Bypass and verify closed.	RED indicating light illuminated.	____	____	____
CUE: 2-1501-13A is not required for 2B LPCI pump.				
3. Verify MIN FLOW VLV 2-1501-13A closed if not needed.	RED indicating light illuminated.	____	____	____
NOTE: The following valves may be verified in any order.				
4. Verify TORUS CLG/TEST valves 2-1501-20A and 2-1501-38A closed.	GREEN indicating lights illuminated.	____	____	____
5. Verify TORUS SPRAY VLVs 2-1501-19A and 2-1501-18A closed.	GREEN indicating lights illuminated.	____	____	____
6. Verify DW SPRAY VLVs 2-1501-28A and 2-1501-27A closed.	GREEN indicating lights illuminated.	____	____	____
7. Verify TORUS CLG/TEST valves 2-1501-20B and 2-1501-38B closed.	GREEN indicating lights illuminated.	____	____	____
8. Verify TORUS SPRAY VLVs 2-1501-19B and 2-1501-18B closed.	GREEN indicating lights illuminated.	____	____	____
9. Verify DW SPRAY VLVs 2-1501-28B and 2-1501-27B closed.	GREEN indicating lights illuminated.	____	____	____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
NOTE: For bleeding off the pressure in the suction piping, the examinee may communicate each of the following steps individually OR instruct the NLO to complete actions of DEOP 0500-03 step G.12.c.(5 thru 8).				
CUE: When directed, as the NLO in the field, communicate that the steps (either individually of as a whole) have been completed.				
10. Unlock AND open 2-1501-74A, U2 LPCI A PMP VENT VLV.	Instructs NLO to complete step G.12.c.(5).(a).	____	____	____
11. Crack open 2-1501-15A, U2 LPCI A PMP VENT VLV until flow is observed from pipe.	Instructs NLO to complete step G.12.c.(5).(b).	____	____	____
12. Close 2(3)-1501-15A, U2 LPCI A PMP VENT VLV.	Instructs NLO to complete step G.12.c.(5).(c).	____	____	____
13. Close AND lock 2-1501-74A, U2(3) LPCI A PMP VENT VLV.	Instructs NLO to complete step G.12.c.(5).(d).	____	____	____
14. * Open 2-1501-47A-R, U2 LPCI A PUMP SUCT PI 2-1501-47A ROOT VLV (at pump) and verify PI 2-1501-47A indicates less than 15 psig.	Instructs NLO to obtain PI 2-1501-47A reading per step G.12.c.(6).	____	____	____
CUE: PI 2-1501-47A indicates 15.5 psig.				
15. * Recognizes reading is NOT less than 15 psig.	Determines reading is greater than 15 psig.	____	____	____
16. Close 2-1501-47A-R, U2 LPCI A PUMP SUCT PI 2-1501-47A ROOT VLV.	Instructs NLO to close 2-1501-47A per step G.12.c.(8).	____	____	____
CUE: 2-1501-47A-R is Closed.				

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
BEGIN ALTERNATE PATH				
17. * Open PP SUCT VLV MO 2-1501-5A.	Only the Green Open light illuminated	_____	_____	_____
18. * Place 2A LPCI PP control switch in AUTO	Depresses and allows 2A LPCI PP c/s to spring return to center (AUTO) position.	_____	_____	_____
19. Notify Unit Supervisor that 2A LPCI pump cannot be used with suction from the CST.	Notifies Unit Supervisor of 2A LPCI pump suction pressure problem when aligned to CST. May recommend using another LPCI pump	_____	_____	_____
CUE: Before examinee proceeds, inform him/her injection is no longer needed and another LPCI pump does NOT need to be selected Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Lineup LPCI to CST for Injection
JPM Number: S-N-d Revision Number: 03
Task Number and Title: 29502LK061, Lineup LPCI to the CST

K/A Number and Importance: 295031A1.01 4.4 / 4.4

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☒ Yes ☐ No SRO Only**:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

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

References: DEOP 0500-03, Rev 17

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. A transient has occurred requiring Alternate Water Injection.

INITIATING CUE

1. The Shift Manager has directed you to line up the 2A LPCI pump suction to the CST and raise RPV water level per DEOP 500-03.

Exelon Nuclear

Job Performance Measure

Verify Spurious Group 1 Isolation - Incomplete

JPM Number: S-C-e

Revision Number: 02

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 01 Update JPM to new format.

Revision 02 Revised to current procedure revision for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to any shutdown IC with a Group 1 present.

NOTE: It is okay to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. When the above steps are completed for this and other JPMs to be run concurrently, then validate the concurrently run JPMs using the JPM Validation Checklist.

3. Enter the following Expert commands:
   - The following overrides SER points for the GP 1 Isolation ON.
     - imf ser0902 on
     - imf ser0908 on
     - imf ser0912 on
     - imf ser0953 on
   - Remove and reset the GP 1 isolation.

4. OPEN AO 2-1301-17 & 20.

5. Acknowledge alarms.

6. This completes the setup for this JPM.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. A spurious Group 1 isolation has occurred.

INITIATING CUE

1. The Unit 2 Unit Supervisor has directed you to verify the Group 1 isolation is complete, utilizing the appropriate hardcard.
2. Inform the Unit Supervisor when the task is complete.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* * Denotes critical steps.
* • Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
NOTE: Examinee should locate the hard card (DAN 902-5 D-4) for a Group 1 isolation. The following steps may be performed in any order.				
1. Examinee verifies closed: Inboard MSIVs • AO 2-203-1A • AO 2-203-1B • AO 2-203-1C • AO 2-203-1D	RED indicating lights illuminated.	_____	_____	_____
2. Examinee verifies closed: Outboard MSIVs • AO 2-203-2A • AO 2-203-2B • AO 2-203-2C • AO 2-203-2D	RED indicating lights illuminated.	_____	_____	_____
3. Examinee verifies closed: MSL Drain Valves • MO 2-220-1 • MO 2-220-2	GREEN indicating lights illuminated.	_____	_____	_____
4. Examinee verifies closed: Sample Valves • AO 2-220-44 • AO 2-220-45	RED indicating lights illuminated.	_____	_____	_____
BEGIN ALTERNATE PATH				

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
5. * Examinee verifies closed: IC Vent Valves • AO 2-1301-17 • AO 2-1301-20	Examinee recognizes that AO 2-1301-17 & 2-1301-20 did **NOT** close.	_____	_____	_____
6. * Closes IC Vent Valves AO 2-1301-17 and 2-1301-20.	Takes manual action for a failed automatic action and closes AO 2-1301-17 and 2-1301-20, by placing c/s in the CLOSED position.	_____	_____	_____
7. Informs the Unit Supervisor Group 1 isolation has been verified complete.	Report Group 1 isolation complete and AO 2-1301-17 and AO 2-1301-20 failed to close automatically.	_____	_____	_____
CUE: Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Verify Spurious Group 1 Isolation - Incomplete
JPM Number: S-N-e Revision Number: 02
Task Number and Title: 295L022, Initiate/Verify automatic actuations of Emergency Systems

K/A Number and Importance: 223002.A4.01 3.6 / 3.5

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☒ Yes ☐ No SRO Only**:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 05 minutes **Actual Time Used:** ____ minutes

References: DAN 902-5 D-4 (hardcard) Rev 20

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.

2. A spurious Group 1 isolation has occurred.

INITIATING CUE

1. The Unit 2 Unit Supervisor has directed you to verify the Group 1 isolation is complete, utilizing the appropriate hardcard.

2. Inform the Unit Supervisor when the task is complete.

Exelon Nuclear

Job Performance Measure

Crosstie Bus 23-1 and Bus 33-1

JPM Number: S-N-f

Revision Number: 00

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 00 New JPM developed for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 2. (Cold shutdown)

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. Perform the following simulator lineup:

   a. On 902-3 panel perform the following:

      - ❑ Place 2A Core Spray pump in PTL.
      - ❑ Place 2A and 2B LPCI pumps in PTL.

   b. On 902-4 panel perform the following:

      - ❑ Verify SDC system secured.
      - ❑ Place 2A and 2C SDC pumps in PTL.
      - ❑ Place 2A RWCU pump in PTL.
      - ❑ Start 2B Recirc MG Vent Fan and stop 2A.
      - ❑ Open AO 4723, DW N2 Backup.
      - ❑ Stop the running Pumpback Compressor.

   c. On 902-7 panel perform the following:

      - ❑ Start the turbine EBOP.
      - ❑ Place the turbine turning gear in PTL.
      - ❑ Place the turbine turning gear oil pump in PTL.
      - ❑ Stop the turbine bearing lift pumps.
      - ❑ Start the generator ESOP.
      - ❑ Place the generator MSOP and Vacuum pump in PTL.
      - ❑ Start 2B Cond Transfer pump and stop 2A.

   d. On 923-1 panel perform the following:

      - ❑ Place 2A RBCCW pump in PTL. (Start another RBCCW pump if necessary)

   e. On 923-5 panel perform the following:

      - ❑ Start 2B S. Turb Bldg Vent Fan and stop 2A.

   f. Insert the following Malfunctions and/or Remotes.

      - ❑ Irf r98 true (Installs 600 psig bypass jumpers)
      - ❑ imf b12 (inserts electrical ATWS to prevent a scram)
      - ❑ irf cirwcujp in (Installs RWCU isol jumpers.)
      - ❑ irf b04 true (lines up RPS CH B to alternate supply MCC 25-2)
      - ❑ irf csbukpfl open (Lines up ECCS keepfill to backup supply)

3. Override annunciator ACK buttons DEPRESSED for panels 902-3, -4, -6, -7, and –55 and the Silence button for one of the Common Panels.

4. Perform the following to X-tie Bus 28 to Bus 29:
   - ❑ Place BUS 23-1 TO TR 28 ACB in PTL.
   - ❑ CLOSE BUS 29 & BUS 28 TIE ACB.
   - ❑ CLOSE BUS 28 & BUS 29 TIE ACB.

5. Perform the following to restart RWCU:
   - ❑ Reset the Bus 28 undervoltage relay.
   - ❑ Reset the GP III Isolation.
   - ❑ OPEN MO 2-1201-3.
   - ❑ Start the RWCU Aux PP.
   - ❑ Reestablish blowdown (~150-200 gpm) so RPV level is stable.

6. Perform the following to deenergize Bus 23-1:
   - ❑ Place the 2/3 D/G control switch to STOP.
   - ❑ Place the DG 2/3 TO BUS 23-1 ACB control switch in PTL.
   - ❑ Place BUS 23 & BUS 23-1 TIE GCB in PTL.

7. Acknowledge alarms.

8. Insert the following Malfunctions and/or Remotes:
   - ❑ irf m55 close (Closes BUS 33-1 & BUS 23-1 TIE ACB)

9. Setup the following Triggers:
   - ❑ None.

10. Acknowledge and reset alarms.

11. During the performance of this JPM, audible panel alarms may sound if the ACK button is not overridden DEPRESSED. Perform the action of the 'other' NSO mentioned in the cue to silence any audible alarms.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Drywell pressure is 2.7 psig.
3. Bus 23-1 is de-energized.
4. Bus 33-1 is energized.
5. A Dead Bus transfer is required to be performed between Bus 33-1 and 23-1.

INITIATING CUE

1. The Unit Supervisor has directed you to perform a Dead Bus transfer with Bus 33-1 Live and Bus 23-1 Dead, per the hard card.
2. Another NSO will respond to alarms on other panels if necessary.
3. Inform the Unit Supervisor when the task is complete.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* * Denotes critical steps.
* • Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

	PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
	NOTE: Provide the Examinee a copy of DOP 6500-30 HARD CARD.				
1.	Examinee identifies that there is an ECCS initiation signal present (given in cue).	ECCS signal present (given in cue).	_____	_____	_____
2. *	Place the 2A LPCI PP in Pull To Lock.	Control Switch placed in PTL.	_____	_____	_____
3. *	Place the 2B LPCI PP in Pull To Lock.	Control Switch placed in PTL.	_____	_____	_____
4. *	Place the 2A CORE SPRAY PP in Pull To Lock.	Control Switch placed in PTL.	_____	_____	_____
	CUE: As the Unit 3 NSO, acknowledge and confirm completion of the request.				
5. *	Requests Unit 3 NSO perform actions on the 903-8 panel.	Requests Unit 3 NSO : • SYNCHROSCOPE for Bus 33-1 & Bus 23-1 TIE ACB is ON. • Bus 33-1 & Bus 23-1 TIE ACB is CLOSED.	_____	_____	_____
6. *	Place SYNCHROSCOPE switch to ON for BUS 23 1 & BUS 33 1 TIE ACB.	Inserts SYNCHROSCOPE key and rotates to the ON position.	_____	_____	_____
7. *	On the 902-8 panel, take Bus 23-1 & Bus 33-1 TIE ACB in CLOSE for at least three seconds.	RED indicating light illuminates.	_____	_____	_____
	CUE: As the Unit 3 NSO, report Bus 33-1 current and voltage indications are normal. If asked, inform the candidate that the ECCS pumps are to REMAIN in PTL.				

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
8. Informs Unit Supervisor of completion of task.	Examinee notifies the Unit 2 Unit Supervisor.	_____	_____	_____
CUE: Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Crosstie Bus 23-1 and Bus 33-1
JPM Number: S-N-f Revision Number: 00
Task Number and Title: 26204LP009, Perform a 4 kV bus transfer to the other unit using the 4 kV crosstie breakers.

K/A Number and Importance: 262001.A4.01 3.4 / 3.7

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☐ Yes ☒ No SRO Only**:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 8 minutes **Actual Time Used:** ____ minutes

References: DOP 6500-30, rev 09

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Drywell pressure is 2.7 psig.
3. Bus 23-1 is de-energized.
4. Bus 33-1 is energized.
5. A Dead Bus transfer is required to be performed between Bus 33-1 and 23-1.

INITIATING CUE

1. The Unit Supervisor has directed you to perform a Dead Bus transfer with Bus 33-1 Live and Bus 23-1 Dead, per the hard card.
2. Another NSO will respond to alarms on other panels if necessary.
3. Inform the Unit Supervisor when the task is complete.

Exelon Nuclear

Job Performance Measure

Drive TIP Detector to the Isolation Test Position

JPM Number: S-N-g

Revision Number: 01

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 00 Bank JPM.

Revision 01 Revised to current procedure revision for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 12.

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. Ensure NO Group 2 isolation is present.

3. Insert following Malfunctions and/or Remotes:

   - None.

4. Setup the following Triggers:

   - None.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Post Maintenance Testing is required on the 2A TIP machine.
3. The Radiation Protection Department has been notified of the pending evolution.
4. All personnel are clear of TIP room, Shield Chamber, Index Machine and CRD areas.

INITIATING CUE

1. The Unit Supervisor has directed you to drive Channel "A" TIP Detector to the ISOLATION Position per DOP 0700-06.
2. Inform the Unit Supervisor when the task is complete.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* Denotes critical steps.

- Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

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The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

	PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
	NOTE: Provide the Examinee a copy of DOP 0700-06				
1.	Verify all BALL VALVES closed at Panel 902(3)-13: • VLV CONTROL CH 1 • VLV CONTROL CH 2 • VLV CONTROL CH 3 • VLV CONTROL CH 4 • VLV CONTROL CH 5	White indicating lights illuminated for: • VLV CONTROL CH 1 • VLV CONTROL CH 2 • VLV CONTROL CH 3 • VLV CONTROL CH 4 • VLV CONTROL CH 5	_____	_____	_____
2. *	Select DRIVE CONTROL CH A to insert detector.	Selects DRIVE CONTROL CH A.	_____	_____	_____
3. *	Place MODE switch in MAN.	Rotate switch to the MAN position.	_____	_____	_____
4. *	Place MAN. VALVE CONTROL in OPEN.	Rotate switch to the OPEN position.	_____	_____	_____
5.	At VLV CONTROL CH 1, verify BALL VALVE OPEN light is illuminated.	Red light is illuminated.	_____	_____	_____
	NOTE: Cycling of the mode switch, per step G.3.h, should not be necessary.				
6. *	Place MANUAL switch in REV.	Rotate switch to the REV position.	_____	_____	_____
7. *	Place MANUAL switch in OFF.	Rotate switch to the OFF position.	_____	_____	_____
8.	Verify READY light LIT.	White light is illuminated.	_____	_____	_____
9.	Place CORE LIMIT selector in TOP.	Rotate switch to the TOP position.	_____	_____	_____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
10. Verify CORE LIMIT display produces a digit symbol in each digit window.	A digit is displayed in all four windows.	_____	_____	_____
11. Place CORE LIMIT selector in BOTTOM.	Rotate switch to the BOTTOM position.	_____	_____	_____
12. Verify CORE LIMIT display produces a digit symbol in each digit window.	A digit is displayed in all four windows.	_____	_____	_____
13. Verify DETECTOR POSITION display produces a digit symbol in each digit window.	A digit is displayed in all four windows.	_____	_____	_____
NOTE: Procedure step G.3.q is not required to be performed.				
14. Verify CORE LIMIT switch in BOTTOM position.	Switch is in BOTTOM position.	_____	_____	_____
15. * At DRIVE CONTROL CH A, place MANUAL switch in FWD to start TIP detector insertion.	Rotate switch to the FWD position.	_____	_____	_____
16. Verify DETECTOR POSITION rises from the IN-SHIELD position with increasing counts.	Digits increasing.	_____	_____	_____
17. WHEN DETECTOR POSITION has counted approximately 30 digits, THEN place MANUAL switch in OFF.	Rotate switch to the OFF position.	_____	_____	_____
18. Verify the IN-SHIELD light is OFF at the applicable Drive Unit.	White light is illuminated.	_____	_____	_____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
19. Informs Unit Supervisor	Examinee notifies the Unit 2 Unit Supervisor	_____	_____	_____
CUE: Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Drive TIP Detector to Isolation Position
JPM Number: S-N-g Revision Number: 01
Task Number and Title: 21501LP002, Given plant conditions which require a TIP trace, run a TIP trace in the manual mode of operation.

K/A Number and Importance: 215001.A4.03 3.0 / 3.1

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☐ Yes ☒ No SRO Only**:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 15 minutes **Actual Time Used:** ____ minutes

References: DOP 0700-06, rev 24

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Post Maintenance Testing is required on the 2A TIP machine.
3. The Radiation Protection Department has been notified of the pending evolution.
4. All personnel are clear of TIP room, Shield Chamber, Index Machine and CRD areas.

INITIATING CUE

1. The Unit Supervisor has directed you to drive Channel “A” TIP Detector to the ISOLATION Position per DOP 0700-06.
2. Inform the Unit Supervisor when the task is complete.

Exelon Nuclear

Job Performance Measure

Align Charcoal Adsorber Filters in Parallel Mode of Operation

JPM Number: S-N-h

Revision Number: 02

Date: 10/07

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 01 Update JPM to new format.

Revision 02 Revised to current procedure revision for ILT 07-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 12.

NOTE: It is acceptable to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. Verify the Charcoal Adsorbers are in SERIES mode of operation.

3. Enter the following Expert Commands:

   - ior ogdpcha 37 (Overrides Charcoal adsorber DP meter to 37 in. wtr)
   - trgset 1 ".not. ogl54049" (Activates trigger 1 when the AO 2-5423 CLOSE light is NOT lit)
   - trg 1 "dor ogdpcha" (Deletes Charcoal adsorber DP meter override)

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. The system engineer has determined the offgas system D/P is high and recommends switching to the parallel mode of operation from the series mode of operation.

INITIATING CUE

1. Unit Supervisor has directed you to align the charcoal adsorbers to the parallel mode of operation in accordance with DOP 5400-05.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* * Denotes critical steps.
* • Denotes critical elements of a critical step.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section at the bottom of the page. The comment section should be used to document the reason that a step is marked as unsatisfactory and to document unsatisfactory performance relating to management expectations.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

Job Performance Measure (JPM)

JPM Start Time: _____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
NOTE: Provide the Examinee a copy of DOP 5400-05.				
1. Proceeds to step G.22 of DOP 5400-05.	Locates Step G.22 of the procedure.	_____	_____	_____
2. Notify RP of parallel mode of operation.	Notifies RP of parallel mode of operation.	_____	_____	_____
CUE: Respond as RP and acknowledge report, when contacted.				
* 3. OPEN AO-2-5417, ADSORBER TRN 2 BYPASS VLV.	RED light illuminates.	_____	_____	_____
* 4. OPEN AO-2-5423, ADSORBER TRN 3 BYPASS VLV.	RED light illuminates.	_____	_____	_____
* 5. CLOSE AO-2-5415, ADSORBER TRN 1 DISCH VLV.	RED light illuminates.	_____	_____	_____
* 6. CLOSE AO-2-5421, ADSORBER TRN 2 DISCH VLV.	RED light illuminates.	_____	_____	_____
* 7. OPEN AO-2-5416, ADSORBER TRN 1 BYPASS VLV.	RED light illuminates.	_____	_____	_____
* 8. OPEN AO-2-5422, ADSORBER TRN 2 BYPASS VLV.	RED light illuminates.	_____	_____	_____
9. Notify Unit Supervisor of task completion.	Unit Supervisor notified of task completion.	_____	_____	_____
CUE: Acknowledge report of task completion.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Align Charcoal Adsorber Filters in Parallel mode of operation.
JPM Number: S-N-h Revision Number: 02
Task Number and Title: 271L005, Startup the Offgas Charcoal Adsorber system

K/A Number and Importance: 271000.A4.09 3.3 / 3.2

Suggested Testing Environment: Simulator

Actual Testing Environment: ☒ Simulator ☐ Control Room ☐ In-Plant

Testing Method: ☐ Simulate ☒ Perform Alternate Path**:** ☐ Yes ☒ No SRO Only**:** ☐ Yes ☒ No

Time Critical: ☐ Yes ☒ No

Estimated Time to Complete: 08 minutes **Actual Time Used:** ____ minutes

References: DOP 5400-05, Rev 30

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

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

Comments: _____

Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ Date: _____

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. The system engineer has determined the offgas system D/P is high and recommends switching to the parallel mode of operation from the series mode of operation.

INITIATING CUE

1. Unit Supervisor has directed you to align the charcoal adsorbers to the parallel mode of operation in accordance with DOP 5400-05.