

Exelon Nuclear

Job Performance Measure

Injection of Standby Liquid Control System

JPM Number: S-N-a

Revision Number: 01

Date: 11/06

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.

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 scmpoca
imf scmpocb
```

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 scmpoca"|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 scmpocb"|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 alternate injection.
3. The Unit Supervisor has authorized the use of Hard Cards.

INITIATING CUE

1. The Unit Supervisor has ordered you to inject SBLC, for Alternate Injection.
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 #
<u>NOTE:</u> 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 <u>OR</u> SYS 2 & 1 position.	Turns the SBLC INJECTION CONTROL keylock switch to either the full right OR full left position.	_____	_____	_____
<u>NOTE:</u> The A & B SBLC pump breaker tripped on overcurrent and will not start.				
2. Verify: <ul style="list-style-type: none"> Amber SQUIB A <u>AND</u> SQUIB B pilot lights <u>NOT</u> 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). 	Realizes SBLC is NOT injecting.	_____	_____	_____
<u>NOTE:</u> 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: <ul style="list-style-type: none"> PUMP 1 and PUMP 2 pilot light lit. FLOW pilot light lit. 	PUMP 1 and PUMP 2 pilot lights now lit	_____	_____	_____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST		STANDARDS	SAT	UNSAT	Comment #
5.	Verify the following RWCU valves close: <ul style="list-style-type: none">• 2-1201-1• 2-1201-1A• 2-1201-2• 2-1201-3• 2-1201-7	Verifies CLOSED indicating lights illuminated for the following: <ul style="list-style-type: none">• 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	_____	_____	_____
		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: 01

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 16

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 alternate injection.
3. The Unit Supervisor has authorized the use of Hard Cards.

INITIATING CUE

1. The Unit Supervisor has ordered you to inject SBLC, for Alternate Injection.
2. Inform the Unit Supervisor when the task is complete.

Exelon Nuclear

Job Performance Measure

Perform Core Spray Pump Test With Torus Available

JPM Number: S-N-b

Revision Number: 01

Date: 11/06

Developed By: _____

Instructor

Date

Approved By: _____

Facility Representative

Date

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 00 JPM created for ILT 05-1 NRC Exam.

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

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Core Spray pump operability surveillance can be performed from any IC with Core Spray in the normal standby lineup

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. Start the LPCI/CS room cooler fans.
3. Enter the following Expert commands to set up an automatic trigger to trip the Core Spray pump after the test valve is opened:

NOTE: The trigger assignment can be changed to any other available trigger to accommodate running this JPM concurrently with other JPMs.

- **imf ser0111 off** (Overrides alarm 902-3 F-04, 2B Core Spray PPP Overload, OFF)
- **trgset 1 "cslop4b"** (Activates when MO 1402-4B OPEN light turns ON)
- **imf csppbflt (1 10)** (After 10 sec, inserts a 2B Core Spray pump trip)

DOCUMENT PREPARATION

Markup a copy of DOS 1400-05 as complete up through Step I.6. (Ready to start 2B Core Spray Pump per step I.7).

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. The Unit 2 Core Spray 'B' Pump operability surveillance is required due to maintenance.
3. The operability surveillance for the 2A Core Spray pump is NOT needed.
4. The system is filled and vented.
5. The required valve operability surveillance has been completed.
6. Vibration data is NOT required.
7. The Unit 2 NLO is standing by in the corner room.
8. The LPCI/Core Spray Room Coolers are running.

INITIATING CUE

1. The Unit Supervisor directs you to perform DOS 1400-05 step I.8 for the 2B Core Spray pump.
2. All applicable Prerequisites have been met.
3. Notify the Unit Supervisor upon completion of step I.8.

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

Job Performance Measure (JPM)

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

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- Denotes critical elements of a critical step.

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The timeclock starts when the candidate acknowledges the initiating cue.

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Job Performance Measure (JPM)

JPM Start Time: _____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<u>NOTE:</u> Provide the Examinee the marked up copy of DOS 1400-05.				
1. Verify the following valve line up: <ul style="list-style-type: none"> MO 2-1402-4B Closed MO 2-1402-38B Open 2-1402-6B Open MO 2-1402-25B Closed MO 2-1402-3B Open 2-1402-40B-SV Closed 	Verifies the following: <ul style="list-style-type: none"> Green Closed light On Green Open light On Green Open light On Green Closed light On Green Open light On Directs NLO to Verify 2-1402-40B SV Closed. 	_____	_____	_____
<u>CUE:</u> 2-1402-40B-SV, INST SV is closed.				
<u>NOTE:</u> The next three (3) actions may be requested to be performed at the same time.				
2. Verify 2B CORE SPRAY MOTOR has adequate lubrication per.	Contacts NLO to verify 2B CS Motor oil level +0 to –1/8 inch of the Oil Sightglass Standstill Line.	_____	_____	_____
<u>CUE:</u> 2B Core Spray motor oil level is normal (within +0 to –1/8 inch band).				
3. Verify 2B LPCI/CS Room Cooler is operating properly.	Contacts NLO to verify proper room cooler operation.	_____	_____	_____
<u>CUE:</u> 2B LPCI/CS room cooler is operating normally.				
4. Direct NLO to open 2-1402-40B-SV and report pressure.	Directs SV 2-1402-40B Open.	_____	_____	_____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<u>CUE:</u> When asked, report: "2-1402-40B-SV Inst SV is Open and pressure is 7 psig".				
5. Record suction pressure provided by NLO.	Pressure of 7 psig recorded on Data Sheet 1.	_____	_____	_____
6. Calculate 2-1402-8B initial closed DP.	DP Calculated: 2-1450-1B _____ psig Minus 2-1402-40B <u> 7 </u> psig Records 2-1450-1B pressure as 75 psig (\pm 5 psig)	_____	_____	_____
<u>CUE:</u> If examinee requests the above calculation to be verified, sign the "verified by" line. If the student informs the SRO that the Core Spray System should be declared inoperable, acknowledge the report.				
7. Close PP DISCH VLV, MO 2-1402-24B	Only the Red Closed light illuminated.	_____	_____	_____
*8. Start 2B CORE SPRAY Pump.	Only the Red On light illuminated.	_____	_____	_____
<u>NOTE:</u> 2B Core Spray Pump overcurrent trip malfunction is automatically inserted 10 seconds after the 2-1402-4B valve has dual indication				
*9. Open FLOW TEST VLV MO 2-1402-4B.	Rotates and holds MO 2-1402-4B Control switch CW to Open.	_____	_____	_____
BEGIN ALTERNATE PATH				
10. Acknowledge and report alarm for 2B CS pump trip.	Acknowledges alarm and makes report.	_____	_____	_____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<p style="text-align: center;"><u>CUE:</u> Acknowledge report.</p>				
*11. Immediately Close 2-1402-4B.	Green Closed light illuminated.	_____	_____	_____
<p style="text-align: center;"><u>CUE:</u> If examinee enters DOA 6500-10, respond that the assist NSO will execute that procedure.</p>				
<p style="text-align: center;"><u>CUE:</u> If examinee terminates, or requests permission to terminate the surveillance OR If examinee references the DAN for pump trip and has at least considered the actions to take, then cue: Terminate the surveillance. Leave the system in the current lineup. Someone else will be assigned to verify the system is restored to normal.</p>				
12. Notify Unit Supervisor of task completion.	Unit Supervisor notified of task completion.	_____	_____	_____
<p style="text-align: center;"><u>CUE:</u> Acknowledge report of task completion.</p>				
	END			

JPM Stop Time: _____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Perform Core Spray Pump Test With Torus Available

JPM Number: S-N-b

Revision Number: 01

Task Number and Title: 209L004, Perform a CS pump operability test and determine if the results meet the acceptance criteria as stated in DOS 1400-05

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

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: 22 minutes **Actual Time Used:** _____ minutes

References: DOS 1400-05, rev 34

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 2 Core Spray 'B' Pump operability surveillance is required due to maintenance.
3. The operability surveillance for the 2A Core Spray pump is NOT needed.
4. The system is filled and vented.
5. The required valve operability surveillance has been completed.
6. Vibration data is NOT required.
7. The Unit 2 NLO is standing by in the corner room.
8. The LPCI/Core Spray Room Coolers are running.

INITIATING CUE

1. The Unit Supervisor directs you to perform DOS 1400-05 step I.8 for the 2B Core Spray pump.
2. All applicable Prerequisites have been met.
3. Notify the Unit Supervisor upon completion of step I.8.

Exelon Nuclear

Job Performance Measure

Unisolating One (1) Main Steam Line

JPM Number: S-N-c

Revision Number: 08

Date: 11/06

Developed By: _____

Instructor

Date

Approved By: _____

Facility Representative

Date

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 07 Bank JPM.

Revision 08 Revised to current procedure revision for ILT 06-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 16 (<50% power).
2. Power needs to be low enough so that isolating one main steam line will NOT cause a Group 1 high flow isolation.
3. Close 'D' Main Steam Line Isolation Valves:
 - AO-2-203-1D
 - AO-2-203-2D
4. Verify Main Steam Line drain valves closed:
 - MO 2-220-1, 2, 3 & 4
 - MO 2-220-90A, B, C & D
5. Insert following Malfunctions and/or Remotes.
 - None.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Following maintenance work on the AO 2-203-2D MSIV, the “D” Main Steam Line is ready to be unisolated.

INITIATING CUE

1. The Unit Supervisor has directed you to unisolate the “D” Main Steam Line in accordance with DOP 0250-02, step G.4.

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

Information For Evaluator’s Use:

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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 #
<u>NOTE:</u> Provide the Examinee a copy of DOP 0250-02				
1. Reviews procedure to determine appropriate method.	Determines MOs 2-220-1 AND 2-220-2 are available, and selects the preferred method.	_____	_____	_____
2. Open MO 2-220-1 (MSL DRN VLV).	Red Open light On.	_____	_____	_____
3. Open MO 2-220-2 (MSL DRN VLV).	Red Open light On.	_____	_____	_____
4. Verify MO 2-220-3 (MSL DRN VLV) is OPEN.	Red Open light On.	_____	_____	_____
5. Wait a minimum of 5 minutes.	5 minutes elapsed OR verbal cue received.	_____	_____	_____
<u>CUE:</u> Inform examinee that 5 minutes has elapsed.				
6. Open MO 2-220-90D (MSL DRN VLV to Condenser).	Red Open light On.	_____	_____	_____
7. Wait a minimum of 5 minutes.	5 minutes elapsed OR verbal cue received.	_____	_____	_____
<u>CUE:</u> Inform examinee that 5 minutes has elapsed.				
8. * Open AO 2-203-2D ("D" OUTBOARD MSIV).	Green Open light On.	_____	_____	_____
9. Wait a minimum of 5 minutes,	5 minutes elapsed OR verbal cue received.	_____	_____	_____
<u>CUE:</u> Inform examinee that 5 minutes has elapsed.				

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
10. Open AO 2-203-1D ("D" * INBOARD MSIV).	Green Open light On.	_____	_____	_____
11. Close MO 2-220-90D (MSL DRN VLV to Condenser).	Green Closed light On.	_____	_____	_____
12. Close MO 2-220-1 (MSL ISOL DRN VLV).	Green Closed light On.	_____	_____	_____
13. Close MO 2-220-2 (MSL DRN VLV).	Green Closed light On.	_____	_____	_____
14. Close MO 2-220-3 (MSL DRN VLV).	Green Closed light On.	_____	_____	_____
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Unisolating One (1) Main Steam Line

JPM Number: S-N-c

Revision Number: 08

Task Number and Title: 239L004 Unisolating 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: 10 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. Following maintenance work on the AO 2-203-2D MSIV, the "D" Main Steam Line is ready to be unisolated.

INITIATING CUE

1. The Unit Supervisor has directed you to unisolate the "D" Main Steam Line, in accordance with DOP 0250-02, step G.4..

Exelon Nuclear

Job Performance Measure

Start the SDC System for Cooling Mode of Operation

JPM Number: S-N-d

Revision Number: 15

Date: 11/06

Developed By: _____

Instructor

Date

Approved By: _____

Facility Representative

Date

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 14 Bank JPM.

Revision 15 Revised to current procedure revision for ILT 06-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to IC 4.

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 recirc loop temperature ≤ 325 deg. F. If necessary, open a turbine bypass valve to lower temperature.
3. Adjust RWCU Blowdown to maintain level at 35 inches.
4. Reset Group II and II Isolations, using isolation reset switch.
5. Display "RECIRC OUTLET TEMP RATE", display # 44, on an overhead monitor.
6. Have stopwatch available, if requested for valve timing.
7. Set the operator selected computer alarm for reactor water temperature at 190 deg. F.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. Unit 2 is in the process of a normal Unit Shutdown per DGP 02-01.
3. Reactor Water temperature has dropped to less than 340°F. Reactor Water level has been raised to +35 from +30 inches to support starting up the SDC system..
4. BOTH Reactor Recirc pumps are running.
5. 2A RBCCW heat exchanger is valved in with the 2A RBCCW pump running.
6. 2/3 RBCCW heat exchanger is aligned to Unit 2 with the 2/3 RBCCW pump running.
7. The Isolation Condenser is Out of Service and isolated.
8. The 2-3719-A-500 is open and ONLY the 2A SDC heat exchanger is available.
9. The SDC system has been filled and vented in accordance with DOP 1000-01.
10. Unit 2 NLO is standing by near the SDC pump room to observe the 2A SDC pump for proper operation.
11. "Operator Select" Alarm for reactor water temperature has been selected and is set for 190°F.

INITIATING CUE

1. The Unit 2 Unit Supervisor has directed you to place SDC in operation, using the 2A SDC loop with suction from both Recirc Loops and establish a cooldown rate of <100°F/hr in accordance with DOP 1000-03.

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

Information For Evaluator's Use:

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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 #
<u>NOTE:</u> Provide the Examinee a copy of DOP 1000-03				
<u>NOTE:</u> Any of the following cues may be needed in response to the operator ensuring the "Prerequisites", "Precautions", and "Limitations and Actions" are being met.				
<u>CUE:</u> If asked "Secondary containment is in effect".				
<u>CUE:</u> If notified, as Rad Protection, that the SDC system will be placed in service, acknowledge report.				
<u>CUE:</u> If asked "2A SDC pump oil level is at the Oil Sight Glass Standstill Line".				
<u>CUE:</u> If asked "The operator selected alarm for RPV water temperature is at 190°F".				
<u>CUE:</u> If asked "Reactor vessel flange and head flange temperatures are being monitored per appendix A".				
1. Open 2-3719-A-500, SDC HX RBCCW OUTLET VLV.	Condition met, given in initial conditions.	_____	_____	_____
2. * Time and open MO 2-3704, RBCCW OUTLET VLV, for 11 seconds.	Opens MO 2-3704 for 11 seconds.	_____	_____	_____
3. Selects a loop to align.	Determines which loop will first be lined up for operation.	_____	_____	_____
<u>NOTE:</u> Steps 4 through 6 may be performed after steps 7 through 9.				
4. * Open MO 2-1001-1B, INLET ISOL VLV (if A loop selected for initial Lineup). MO 2-1001-1A (if B selected for initial lineup).	Red Open light illuminated.	_____	_____	_____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
5. * Open MO 2-1001-5A, OUTLET ISOL VLV (if A loop selected for initial lineup).	Red Open light illuminated.	_____	_____	_____
6. Observe Reactor Water level indication for any changes.	Level OBSERVED stable.	_____	_____	_____
7. * Open MO 2-1001-1A (B), INLET ISOL VLV.	Red Open light illuminated.	_____	_____	_____
8. * Open MO 2-1001-5B (A), OUTLET ISOL VLV.	Red Open light illuminated.	_____	_____	_____
9. Observe Reactor Water level indication for any changes.	Level OBSERVED stable.	_____	_____	_____
10. * Open MO 2-1001-2A, PP SUCT VLV.	Red Open light illuminated.	_____	_____	_____
<p style="text-align: center;"><u>CUE:</u></p> <p>If informed, as the NLO, that the 2A SDC pump is to be started respond: "I am standing by waiting for a start of the 2A SDC pump".</p>				
11. * Start 2A SDC pump.	Red On light illuminated.	_____	_____	_____
12. Observe 2A SDC pump discharge pressure.	OBSERVES 2A SDC pump discharge pressure as indicated by 2A PP DISCH PRESS, PI 2-1040-1A.	_____	_____	_____
13. Throttle open 2A PP DISCH VLV MO 2-1001-4A to achieve a desired cool down rate. OR limited by either its maximum valve position (60%) OR minimum pump discharge pressure of 100.	Adjusts MO 2-1001-4A to obtain a controlled cooldown rate of <100°F/hr. OR until a Maximum of 60% open indication is reached as indicated by POI 1040-2A. OR ≥100 psig pump discharge pressure psig as indicated by PI 2-1040-1A.	_____	_____	_____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<u>CUE:</u> When directed, as the NLO, to inspect the accessible piping and equipment for leakage respond: "all system components appear normal".				
<u>NOTE:</u> Initially overshooting the target cooldown rate is NOT cause for failure. This step can be marked SAT once a cooldown rate of <100°F/hr has been established for 3-5 minutes.				
<u>CUE:</u> Respond as US and inform the student that the task is complete..				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Start the SDC System for Cooling Mode of Operation

JPM Number: S-N-d

Revision Number: 15

Task Number and Title: 205L001, Start the Shutdown Cooling System for the Cooling Mode of Operation.

K/A Number and Importance: 205000.A4.01 3.7 / 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 1000-03, rev 61

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. Unit 2 is in the process of a normal Unit Shutdown per DGP 02-01.
3. Reactor Water temperature has dropped to less than 340°F. Reactor Water level has been raised to +35 from +30 inches to support starting up the SDC system..
4. BOTH Reactor Recirc pumps are running.
5. 2A RBCCW heat exchanger is valved in with the 2A RBCCW pump running.
6. 2/3 RBCCW heat exchanger is aligned to Unit 2 with the 2/3 RBCCW pump running.
7. The Isolation Condenser is Out of Service and isolated.
8. The 2-3719-A-500 is open and ONLY the 2A SDC heat exchanger is available.
9. The SDC system has been filled and vented in accordance with DOP 1000-01.
10. Unit 2 NLO is standing by near the SDC pump room to observe the 2A SDC pump for proper operation.
11. "Operator Select" Alarm for reactor water temperature has been selected and is set for 190°F.

INITIATING CUE

1. The Unit 2 Unit Supervisor has directed you to place SDC in operation, using the 2A SDC loop with suction from both Recirc Loops and establish a cooldown rate of <100°F/hr in accordance with DOP 1000-03.

Exelon Nuclear

Job Performance Measure

Vent the Torus with level less than 30 feet

JPM Number: S-N-e

Revision Number: 03

Date: 11/06

Developed By: _____

Instructor

Date

Approved By: _____

Facility Representative

Date

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 02 Bank JPM.

Revision 03 Revised to current procedure revision for ILT 06-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to an IC with the mode switch NOT in run, so that the proper alarms and interlocks will work.

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 Torus water level is 20 feet.
3. Insert following Malfunctions and/or Remotes.
 - IMF CIGP2I (Spurious Group II Isolation)
 - IOR PCDOOP61 OFF (prevents the 1601-61 valve from opening)
 - Adjusts Torus Level indications to 20 feet.
 - ❖ ior atl10 25.0
 - ❖ ior pcltr10a 20.0
 - ❖ ior pcltr10b 20.0
 - ior pcptr103 58.0 (Adjusts Torus Bottom Pressure to 58.0 psig)
 - Pulls ECCS Initiation Logic fuses so when Drywell pressure is forced high, NO ECCS starts.
 - ❖ irf lp1aaf1f pulled
 - ❖ irf lp701af pulled
 - ❖ irf lp1aaf2f pulled
 - ❖ irf lp701bf pulled
 - ❖ irf csaloff pulled
 - ❖ irf csblgoff pulled
 - ❖ irf hp2a1f1 pulled
 - ❖ irf hp2b1f1 pulled
 - Adjusts Drywell & Torus pressures to 50.0 psig.
 - ❖ ior pcp8524 50.0
 - ❖ ior pcpdw102 50.0
 - ❖ ior pcp85401 5.0|
 - ❖ ior pcptr1 5.0
4. Verify the SBT system operating and verify flow ~4000 scfm.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 Aux NSO.
2. A break inside the Primary Containment has occurred.
3. Torus bottom pressure is about to exceed the Primary Containment pressure limit in DEOP 200-01.
4. Reactor Building and Turbine Building have already been evacuated.
5. Torus water level is 20'.
6. The Instrument Bus and ESS are energized.
7. The Instrument Air System is available.

INITIATING CUE

1. The Unit Supervisor has directed you to vent the Primary Containment in accordance with DEOP 500-04 to control Primary Containment pressure.

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 #
<u>NOTE:</u> Provide the Examinee a copy of DEOP 0500-04.				
1. Verify the following: <ul style="list-style-type: none"> Control Room Isolation switch CRM is in ISOLATE A Control Room Air Filtration Booster Fan is running. 	At the 923-5 panel: <ul style="list-style-type: none"> Places CRM ISOL switch to ISOLATE. Starts either Booster Fan (Red On light illuminated). 	_____	_____	_____
2. Evacuate the RB and TB.	Condition met in Initial Conditions.	_____	_____	_____
3. Verify SBGT is operating and flow is ~ 4000 scfm.	Verifies 2/3A SBGT train FI 7540-13 is reading ~4000 scfm.	_____	_____	_____
4. Verify Reactor Mode switch <u>NOT</u> in RUN.	Verifies Reactor Mode switch <u>NOT</u> in RUN.	_____	_____	_____
5. Place VENT ISOL SIGNAL BYPASS switch on 902-5 panel to TORUS.	Momentarily places Bypass switch to Torus Position. May receive annunciator 902-3 A-15.	_____	_____	_____
6. Open AO 2-1601-61, TORUS 2-INCH VENT VLV.	Places AO 2-1601-61 control switch to OPEN position and determines that the valve will not open.	_____	_____	_____
BEGIN ALTERNATE PATH				
7. * Place VENT ISOL SIGNAL BYPASS switch on 902-5 panel to DRYWELL.	Momentarily places Vent Isol Signal Bypass switch to Drywell position. May receive annunciator 902-3 A-15.	_____	_____	_____
<u>CUE:</u> When examinee reads TORUS BOTTOM PRESS PI 2-1640-103, inform him/her that the meter displays 58 psig.				

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
8. * Open AO 2-1601-62, DW 2-INCH Vent.	Red Open light illuminated.	_____	_____	_____
9. * Open AO 2-1601-63, VENT TO SBTG.	Red Open light illuminated.	_____	_____	_____
10. * Start as many Turbine Building and Radwaste Exhaust fans as possible.	Initiates action to start All available Turbine Building and Radwaste Exhaust fans.	_____	_____	_____
<u>CUE:</u> All available Turbine Building and Radwaste Exhaust fans are operating.				
<u>NOTE:</u> It is not necessary for the Turbine Building and Radwaste Exhaust fans to be started for this JPM.				
11. Determine if SBTG flow is adequate to control and maintain DW pressure below the Primary Containment Pressure Limit.	Containment pressure stable or decreasing.	_____	_____	_____
<u>CUE:</u> DW pressure is being controlled and maintained below the Primary Containment Pressure Limit. If examinee asks reading on TORUS BOTTOM PRESS PI 2-1640-103, inform him/her that the meter has decreased to 53 psig (5 psig from original).				
END				

JPM Stop Time: _____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Vent the Torus with level less than 30 feet

JPM Number: S-N-e

Revision Number: 03

Task Number and Title: 295L099, Vent the primary containment to SBGT to stay below the Primary Containment Pressure Limit.

K/A Number and Importance: 295024.EA1.14 3.4 / 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: 17 minutes **Actual Time Used:** _____ minutes

References: DEOP 0500-04, rev 11

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 break inside the Primary Containment has occurred.
3. Torus bottom pressure is about to exceed the Primary Containment pressure limit in DEOP 200-01.
4. Reactor Building and Turbine Building have already been evacuated.
5. Torus water level is 20'.
6. The Instrument Bus and ESS are energized.
7. The Instrument Air System is available.

INITIATING CUE

1. The Unit Supervisor has directed you to vent the Primary Containment in accordance with DEOP 500-04 to control Primary Containment pressure.

Exelon Nuclear

Job Performance Measure

Crosstie Busses 28 and 29

JPM Number: S-N-f

Revision Number: 00

Date: 11/06

Developed By: _____

Instructor

Date

Approved By: _____

Facility Representative

Date

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 00 New JPM created for ILT 06-1 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. On 902-4 panel perform the following:
 - Start 2B Recirc MG Vent Fan and stop 2A.
 - Open AO 4723, DW N2 Backup.
 - Stop the running Pumpback Compressor.
3. 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.
4. On 923-5 panel perform the following:
 - Start 2B S. Turb Bldg Vent Fan and stop 2A.
5. Ensure the MCC 28-7/29-7 feed is from Bus 29.
6. Ensure U2 125 VDC system is powered from Battery Charger 2.

NOTE: In the next steps the following will occur.

- RPS CH B half scram.
 - Group II and III isolations.
 - Instrument Bus will transfer to Reserve feed.
7. Insert following Malfunctions and/or Remotes.
 - irf cirwcujp in (Installs RWCU isol jumpers.)
 - Transfers 250 VDC to the 2/3 charger.
 - ❖ irf t51 true
 - ❖ irf t50 false
 - irf r98 true (installs RPS 600 psig jumpers to prevent a full scram when RPS CH B is powered from alternate supply)
 - irf b04 true (lines up RPS CH B to alternate supply MCC 25-2)

Job Performance Measure (JPM)

- irf csbukpfl open (Lines up ECCS keepfill to backup supply)
 - irf m89 open (Opens feed to MCC 28-2 to trip 2B RPS MG set and force instrument bus ABT to its reserve source)
 - imf at1 (Opens MCC 28-1 feed to ATS)
8. Override annunciator ACK buttons DEPRESSED for panels 902-4, -5, -6, -7, and -55 and the Silence button for one of the Common Panels.
 9. Reset the GP III Isolation, place the RWCU Aux PP back on and reestablish blowdown so RPV level is stable.
 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. Transformer 28 is being taken OOS to allow internal inspection by EMD.
3. Consideration of AC loads lost during the evolution has been completed and will have no major impact.
4. TS sections 3.8.7 and 3.8.8 have been checked and need not be referenced again
5. DOP 6800-05, Power Restoration to ATS feeds has been referenced. No actions are necessary.

INITIATING CUE

1. The Unit Supervisor has directed you to perform a dead bus transfer of Bus 28 to Bus 29 in accordance with DOP 6700-02 Step G.8
2. Notify the Unit Supervisor when 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 #
<u>NOTE:</u> Provide the Examinee a copy of DOP 6700-02.				
<u>NOTE:</u> Evaluator is to acknowledge all alarms except the 902-7 and 8 panel.				
1. * Open Bus 23-1 to TR-28 ACB.	Green Open Light illuminated.	_____	_____	_____
2. Verifies and reports alarms received: <ul style="list-style-type: none"> • 902-8 A-7 • 902-7 G-8 (after a 20 second time delay) 	Reports the following alarms to the Unit Supervisor: <ul style="list-style-type: none"> • 902-8 A-7 • 902-7 G-8 (after a 20 second time delay) 	_____	_____	_____
3. * Close Bus 29 & Bus 28 tie ACB.	Red Closed light illuminated.	_____	_____	_____
4. * Close Bus 28 & Bus 29 tie ACB.	Red Closed light illuminated.	_____	_____	_____
5. Reset Bus 28 Under Voltage.	In back of 902-8 panel (A2 mid way on right side) Depresses pushbutton 2-7140-12.	_____	_____	_____
<u>NOTE:</u> If asked to have NLO reset UV, inform examinee that the reset shall be done from the control room.				
END				

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Crosstie Busses 28 and 29

JPM Number: S-N-f

Revision Number: 00

Task Number and Title: 262L032 Crosstie 480V Busses 25, 26, 27, 28, and 29

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: 11 minutes **Actual Time Used:** _____ minutes

References: DOP 6700-02, rev 14

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. Transformer 28 is being taken OOS to allow internal inspection by EMD.
3. Consideration of AC loads lost during the evolution has been completed and will have no major impact.
4. TS sections 3.8.7 and 3.8.8 have been checked and need not be referenced again
5. DOP 6800-05, Power Restoration to ATS feeds has been referenced. No actions are necessary.

INITIATING CUE

1. The Unit Supervisor has directed you to perform a dead bus transfer of Bus 28 to Bus 29 in accordance with DOP 6700-02 Step G.8
2. Notify the Unit Supervisor when complete.

Exelon Nuclear

Job Performance Measure

Place a Control Rod OOS on the RWM

JPM Number: S-N-g

Revision Number: 00

Date: 11/06

Developed By: _____

Instructor

Date

Approved By: _____

Facility Representative

Date

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 00 New JPM created for ILT 06-1 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.

- Irf RODH06DA (disarm control rod H-6).

3. Acknowledge alarms and reset alarms.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Unit 2 NSO.
2. Control Rod H-06 was discovered uncoupled, 15 minutes ago.
3. All attempts to couple the rod have been unsuccessful.
4. The Control rod was then inserted to position 00, then electrically disarmed.
5. QNE has been notified.

INITIATING CUE

1. The Unit Supervisor has directed you to take rod H-06 out of service on the Rod Worth Minimizer per DOP 0400-02.
2. Another NSO will complete DOA 0300-05 actions and logging requirements once control rod H-06 is OOS.
3. Notify the Unit Supervisor when 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 #
<u>NOTE:</u> Provide the Examinee a copy of DOP 0400-02.				
1. * Touches the area marked SECONDARY FUNCTION.	SECONDARY FUNCTION selected.	_____	_____	_____
2. * Touches the area marked ROD OUT OF SERVICE.	Rod full core display Appears.	_____	_____	_____
3. * Selects control rod H-06 on the touch screen.	Control Rod H-06 outlined with blue box and shown on screen as SELECTED.	_____	_____	_____
4. * Touches the ENTER REQUEST box.	H-06 Rod position numerals are blue. Withdraw Block inserted for H-06.	_____	_____	_____
5. Touches the EXIT FUNCTION box.	RWM returns to the Main Display.	_____	_____	_____
<u>NOTE:</u> Performer may verify the rod OOS by any of the following: <ul style="list-style-type: none"> The RWM Main Display for H-06 indicates 00 and is blue in color. Select rod to ensure rod in and out blocks are applied. Rod indication is backlit in blue color. Review status screen to verify H-06 is listed as OOS. 				
<u>CUE:</u> Respond as US when examinee informs you they have completed the task. If requested as QNE to update Rod sequence, acknowledge report.				
END				

JPM Stop Time: _____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Place a Control Rod OOS on the RWM

JPM Number: S-N-g

Revision Number: 00

Task Number and Title: 201L027, Enter Substitute Rod Position Data

K/A Number and Importance: 201006.A2.05 3.1 / 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: 11 minutes **Actual Time Used:** _____ minutes

References: DOP 0400-02, rev 22

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 NSO.
2. Control Rod H-06 was discovered uncoupled, 15 minutes ago.
3. All attempts to couple the rod have been unsuccessful.
4. The Control rod was then inserted to position 00, then electrically disarmed.
5. QNE has been notified.

INITIATING CUE

1. The Unit Supervisor has directed you to take rod H-06 out of service on the Rod Worth Minimizer per DOP 0400-02.
2. Another NSO will complete DOA 0300-05 actions and logging requirements once control rod H-06 is OOS.
3. Notify the Unit Supervisor when complete.

Exelon Nuclear

Job Performance Measure

SBGT Testing with receipt of an Auto Initiation Signal

JPM Number: S-N-h

Revision Number: 07

Date: 11/06

Developed By: _____

Instructor

Date

Approved By: _____

Facility Representative

Date

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 06 JPM created for ILT 05-1 NRC Exam.

Revision 07 Revised to current procedure revision for ILT 06-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. Reset the simulator to any low power IC with Reactor Building Ventilation operating in a normal lineup.

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 the 2/3A SBGT train is in STBY and the 2/3B SBGT train is in PRI.
3. Place control switches for Unit 2 and 3 DW and Torus Purge fans in PTL on 923-5 panel
4. Insert following Malfunctions and/or Remotes.
 - Trg 1 "vgdstrta" (Causes Trigger 1 to activate when 2/3 SBGT control switch is place to START)
 - Imf radrbdah (1 45) (fails 'A' channel reactor building vent monitor high, to cause a Group II isolation 45 sec. after 2/3A SBGT switch is placed to START).

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are the Center Desk NSO.
2. 2/3B SBGT train is operable and 2/3A SBGT train is in day 2 of a 7 day LCO per ITS 3.6.4.3 Action A.
3. Minor maintenance has been completed on the 2/3 A SBGT train and the train is back in service.
4. The prerequisites of DOS 7500-02 have been completed and IST testing is NOT required
5. No painting OR propane equipment operation has happened in the last 24 hours.
6. The Initial Cumulative Run Time has been recorded.

INITIATING CUE

1. The Unit 2 Supervisor has directed you to perform DOS 7500-02 for the 2/3A SBGT train for post maintenance testing.
2. Notify the Unit 2 Supervisor when the task is complete up to step I.12.

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 #
<u>NOTE:</u> Provide the Examinee the marked up copy of DOS 7500-02.				
1. Ensure the following: <ul style="list-style-type: none"> 2/3 A and B AIR HEATERS are OFF. 2/3 A and B Fans are OFF. 	Correctly verifies: <ul style="list-style-type: none"> 2/3 A and B AIR HEATERS are OFF. 2/3 A and B Fans are OFF. 	_____	_____	_____
2. Verifies the following annunciators are not in alarm: <ul style="list-style-type: none"> 923-5 A-6, STBY GAS TRT SYS A TROUBLE 923-5 B-6, STBY GAS TRT SYS B TROUBLE 	Correctly verifies the following Annunciators are not in alarm: <ul style="list-style-type: none"> 923-5 A-6, STBY GAS TRT SYS A TROUBLE 923-5 B-6, STBY GAS TRT SYS B TROUBLE 	_____	_____	_____
3. * Verify "B" SBTG SELECT SWITCH in B STBY position.	Places 2/3 B SBTG SELECT switch in B STBY.	_____	_____	_____
4. * Place 2/3 "A" SBTG SELECT SWITCH to START A position.	Places the 2/3 "A" SBTG SELECT SWITCH to START A.	_____	_____	_____
<u>NOTE:</u> The Initial Run Time data has already been recorded. (in the initial cues)				
5. Records the Initial Run Time data for SBTG Train "A" on Checklist A.	Verifies the Initial Run Time data for SBTG Train "A" on Checklist A.	_____	_____	_____
<u>NOTE:</u> 45 sec. after the 2/3A SBTG control switch is placed to START, a malfunction is inserted to cause a Reactor Building Hi-Hi Rad condition (auto start signal for SBTG)				
<u>.CUE:</u> When Reactor Building Isolates (alarm F-14 on the 902-3 panel), provide the following cue: "Attention for an update, Reactor Building Vent Channel 'A' Rad Hi-Hi alarm received"				

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
6. Verifies the 2/3A SBTG train initiated properly.	Verifies the 2/3A SBTG train is initiated properly. When Reactor Building Hi-Hi rad is received, recognizes the need to perform the required Limitation and Action steps.	_____	_____	_____
BEGIN ALTERNATE PATH				
7. * Place the SELECT SWITCH for the non-running train to PRI.	Places the SELECT SWITCH for "B" SBTG train to PRI.	_____	_____	_____
8. * Place the control switch for the train under test to OFF.	Places the control switch for "A" SBTG train to OFF.	_____	_____	_____
9. Verify train in PRI has sufficient flow and the heater is operating	Correctly verifies.	_____	_____	_____
10. Place the Train previously under test to STBY.	Places the control switch for "A" SBTG train to STBY.	_____	_____	_____
11. Verifies a Reactor Building Isolation has occurred on Panel 923-4.	Uses the Limitations and Actions section of DOS 7500-02, step G.1, or any other appropriate procedure to verify the Reactor Building Isolation. (DAN 923-5 A-1 or A-2, Group 2 hard card).	_____	_____	_____
12. Notifies Unit Supervisor of the change in status of the surveillance.	Unit Supervisor notified.	_____	_____	_____
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: SBTG Testing with receipt of an Auto Initiation Signal

JPM Number: S-N-h

Revision Number: 07

Task Number and Title: 261L002, Start the SBTG system.

K/A Number and Importance: 261000.A2.13 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: 15 minutes **Actual Time Used:** _____ minutes

References: DOS 7500-02, rev 38

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 Center Desk NSO.
2. 2/3B SBGT train is operable and 2/3A SBGT train is in day 2 of a 7 day LCO per ITS 3.6.4.3 Action A.
3. Minor maintenance has been completed on the 2/3 A SBGT train and the train is back in service.
4. The prerequisites of DOS 7500-02 have been completed and IST testing is NOT required
5. No painting OR propane equipment operation has happened in the last 24 hours.
6. The Initial Cumulative Run Time has been recorded.

INITIATING CUE

1. The Unit 2 Supervisor has directed you to perform DOS 7500-02 for the 2/3A SBGT train for post maintenance testing.
2. Notify the Unit 2 Supervisor when the task is complete up to step I.12.