Exelon Nuclear

Job Performance Measure

Vent Scram Air Header for Alternate Insertion of Control Rods

JPM Number: S-N-i

Revision Number: 10

Date: 11/06

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 09 Bank JPM.

Revision 10 Revised to current procedure revision for ILT 06-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. None.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are an extra NSO.

2. An ATWS has occurred on Unit 3 and the Operating Team has been unable to insert Control Rods from the Control Room.

INITIATING CUE

1. The Unit 3 Unit Supervisor has directed you to vent the Unit 3 Scram Air Header in accordance with DEOP 500-05.

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 DEOP 0500-05.				
1. Obtain an adjustable wrench for use in instrument test connection removal.	Obtains adjustable wrench from the DEOP Equipment Storage locker at column D-44 on elevation 534' in the Turbine Building OR other suitable location.	____	____	____
CUE: The equipment you identified is in your hand.				
2. Proceeds to the Unit 3 CRD Flow Control Station Area.	Locates the Unit 3 CRD Flow Control Station Area.	____	____	____
3. * Close manual valve 3-0301-109, U3 SCRAM AIR HDR SUPPLY ISOL VLV.	Rotates 3-0301-109 valve CW until handwheel and stem are full in.	____	____	____
CUE: The valve is in the position you described.				
4. * Remove instrument test connection from manual valve 3-0301-102, U3 SCRAM AIR HDR PI 3-302-80 TEST CONN SV.	Rotates manual valve 3-0301-102 instrument test connection CCW until off.	____	____	____
CUE: The component is in the condition you have described.				
5. * Open manual valve 3-0301-102, U3 SCRAM AIR HDR PI 3-0302-80 TEST CONN SV.	Rotates 3-301-102 valve CCW until handwheel and stem are full out	____	____	____
CUE: As the examinee opens the valve inform them that a loud rush of air is heard and eventually stops. The component is in the condition you have described.				

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
6. Notify Unit 3 Unit Supervisor that the Unit 3 Scram Air Header is vented.	Notifies the Unit Supervisor that scram air header is vented.	_____	_____	_____
CUE: Acknowledge the report and inform the Examinee that the Control rods are moving toward position 00.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Vent Scram Air Header for Alternate Insertion of Control Rods
JPM Number: S-N-I Revision Number: 10
Task Number and Title: 295L106, Correctly vent the Unit 3 Scram Pilot Air Header to insert control rods.

K/A Number and Importance: 295037,EA1.05 3.9 / 4.0

Suggested Testing Environment: In-Plant

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: DEOP 0500-05, 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 an extra NSO.

2. An ATWS has occurred on Unit 3 and the Operating Team has been unable to insert Control Rods from the Control Room.

INITIATING CUE

1. The Unit 3 Unit Supervisor has directed you to vent the Unit 3 Scram Air Header in accordance with DEOP 500-05.

Exelon Nuclear

Job Performance Measure

Diesel Generator 2 Local Manual Start

JPM Number: S-N-j

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. None.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are an extra NSO.
2. A fire in the 902-8 panel has caused the feed breakers from TR-22 and TR-21 to Bus 24 to open.
3. The fire prevented the Automatic Start of the Unit 2 Emergency Diesel Generator and the 902-8 Panel controls to start the Unit 2 Emergency Diesel Generator are inoperable.
4. The fire was extinguished before the Control Room was required to be evacuated.

INITIATING CUE

1. The Unit Supervisor has directed you to manually start the Unit 2 Diesel Generator per DSSP 200-T2.
2. Inform the Unit 2 Unit Supervisor when the U2 Emergency Diesel Generator is started and ready for loading.

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 DSSP 0200-T2.				
NOTE: If asked, 902-8 panel indications for U2 Diesel Output breaker are lost.				
1. Verify the following diesel output breaker is Open: • Bus 24-1 Cubical 2, 2-6601 STANDBY DIESEL GEN 2 FEED	For the diesel output breaker verifies the following: Upper Cubicle Lights above local control switch • Green - On • Red – Off Lower Cubicle Green Open flag	_____	_____	_____
CUE: For the diesel output breaker checked respond: The component you identified is in the condition you described.				
2. Proceed to the Unit 2 Diesel Generator.	Locates the Unit 2 Emergency Diesel Generator.	_____	_____	_____
3. Verify Engine Start SELECTOR SW in REMOTE AUTO START.	At the Unit 2 Emergency Diesel Generator local Control panel Verifies Engine Start selector switch iis in the REMOTE AUTO START position.	_____	_____	_____
CUE: The component you identified is in the condition you described.				
4. Verify that the governor speed droop control is set to 5, at the engine governor panel.	At the engine governor verifies governor speed droop is set at 5.	_____	_____	_____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
CUE: The component you identified is in the condition you described.				
NOTE: Trainee needs to exercise EXTREME care when opening cabinet door OR hand examinee included photo of cabinet internals. Do NOT allow the student to break the plane of the cabinet, merely point to the component.				
5. * Using an insulated item OR glove, momentarily depress and hold ASR (AUTO-Start Relay) at Bus 24-1 Cub. 2.	Examinee states he would momentarily depress and holds ASR (AUTO-Start Relay) at Bus 24-1 Cub. 2 using an insulated item OR glove.	____	____	____
CUE: If asked, there is no response by the breaker. When in the EDG room, inform the examinee that the DG is NOT running.				
BEGIN ALTERNATE PATH				
6. * Press ENGINE START pushbutton.	At the Unit 2 Diesel Generator Local Control Panel presses the ENGINE START pushbutton.	____	____	____
CUE: The diesel has started.				
7. Verifies DG COOLING WATER PUMP Unit 2 starts.	At the Unit 2 Emergency Diesel Generator Auxiliary Control panel 2252-47, verifies the DG COOLING WATER PUMP Unit 2 pump Red On light is illuminated.	____	____	____
CUE: The DG COOLING WATER PUMP Red light is illuminated.				
8. Check DG voltage and frequency at the DG metering and relay panel 2252-10.	At the Unit 2 D/G Relaying and Metering Cabinet 2252-10 verifies: • Frequency = 60 Hz • Voltage = 4160 volts	____	____	____

Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
CUE: Point to 60 hz and 4160 volts on gage faces.				
9. Informs the Unit Supervisor that the Unit 2 Diesel Generator has been locally started.	Informs Unit Supervisor	____	____	____
CUE: When the examinee informs the Unit Supervisor the task is complete, acknowledge report.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Diesel Generator 2 Local Manual Start
JPM Number: S-N-j Revision Number: 00
Task Number and Title: 295L154, Perform Local Manual Start of the Unit 2 Diesel Generator

K/A Number and Importance: 264000.A4.04 3.7 / 3.7

Suggested Testing Environment: In-Plant

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: 20 minutes **Actual Time Used:** ____ minutes

References: DSSP 0200-T2, rev 07

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 an extra NSO.

2. A fire in the 902-8 panel has caused the feeder breakers from TR-22 and TR-21 to Bus 24 to open.

3. The fire also prevented the Automatic Start of the Unit 2 Diesel Generator and the 902-8 Panel controls to start the Unit 2 Emergency Diesel Generator are inoperable.

4. The fire was extinguished before the Control Room was required to be evacuated.

INITIATING CUE

1. The Unit Supervisor has directed you to manually start the Unit 2 Diesel Generator per DSSP 200-T2.

2. Inform the Unit 2 Unit Supervisor when the U2 Emergency Diesel Generator is ready for loading.

Exelon Nuclear

Job Performance Measure

Transfer RPS to the Reserve Power Supply

JPM Number: S-N-k

Revision Number: 02

Date: 11/06

Developed By: _____ _____

Instructor **Date**

Approved By: _____ _____

Facility Representative **Date**

Job Performance Measure (JPM)

Revision Record (Summary)

Revision 01 Bank JPM.

Revision 02 Revised to current procedure revision for ILT 06-1 NRC Exam.

Job Performance Measure (JPM)

SIMULATOR SETUP INSTRUCTIONS

1. None.

Job Performance Measure (JPM)

INITIAL CONDITIONS

1. You are an extra NSO.
2. Unit 2 was at 70% power when the 2A RPS MG Set tripped.

INITIATING CUE

1. You have been directed by the Unit 2 Unit Supervisor to perform the in-plant actions to transfer the Unit RPS Bus B from its NORMAL to RESERVE power supply in accordance with DOP 0500-03, “RPS Power Supply Operation”, Step G.3.
2. All applicable prerequisites have been met.
3. The Control Room NSO will install jumpers as needed.
4. Inform the Unit 2 Unit Supervisor when the half scram can be reset.

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 0500-03.				
NOTE: Steps 1 and 2 can be performed in reverse order. Do NOT allow examinee to remove key from key locker.				
1. Obtain key (#209 for Unit 2) for RPS Reserve Power Supply Key Operated Interlock from the WEC.	Key # 209 obtained.	_____	_____	_____
2. Verify all applicable prerequisites have been satisfied. • Power available to MCC 25-2 • TSO notified. • Gaseous Effluent Monitoring Systems are in service • No testing is in progress. • QNE has been notified of transfer. • Shorting Links are installed • Relay 2-0595-107A is energized. • A RPS is reset. • Ch B GR 1,2,3 are reset.	Prerequisites verified (supplied in initial conditions)	_____	_____	_____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
3. Verify the following breakers are closed: • MCC 25-2 Breaker A4, 2-500 RX PROTECTION SYS BUSES RESERVE FEED. • MCC 25-2 Breaker A5, 2-500 RX SAFETY SYS & INST BUS BACKUP TRANSFORMER.	Breaker switch in the ON/CLOSED position. Breaker switch in the ON/CLOSED position.	_____	_____	_____
4. Verify POWER IN, RPS RESERVE FEED red indicating light On at EPA Relay 2AB-1.	Red indicating light verified ON.	_____	_____	_____
5. Verify the following indicating lights are OFF at EPA Relay 2AB-1: • OVER VOLTAGE • UNDER VOLTAGE • UNDER FREQUENCY	Indicating lights NOT illuminated.	_____	_____	_____
6. Verify close breaker on EPA Relay 2AB-1.	Breaker verified closed on EPA Relay 2AB-1.	_____	_____	_____
CUE: The breaker is in the position you described.				
7. Verify POWER OUT, RPS BUS red indicating light ON at EPA Relay 2AB-1.	Red indicating light ON.	_____	_____	_____
CUE: The light is in the condition you described.				
8. Verify POWER IN, RPS RESERVE FEED red indicating light ON at EPA Relay 2AB-2.	Red indicating light ON.	_____	_____	_____

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
CUE: The light is in the condition you described.				
9. Verify the following indicating lights are OFF at EPA Relay 2AB-2: • OVER VOLTAGE • UNDER VOLTAGE • UNDER FREQUENCY	Indicating lights verified OFF.	_____	_____	_____
CUE: The light is in the condition you described.				
10. Verify close breaker on EPA Relay 2AB-2.	Breaker verified closed on EPA Relay 2AB-2.	_____	_____	_____
CUE: The breaker is in the position you described.				
11. Ensure POWER OUT, RPS BUS red indicating light ON at EPA Relay 2AB-2.	Red indicating light ON.	_____	_____	_____
CUE: The light is in the condition you described.				
12. Notify Control Room of supplying power to RPS Bus.	Control Room notified of supplying power to RPS Bus B.	_____	_____	_____
CUE: Acknowledge report.				
NOTE: Examinee must NOT use a radio to communicate inside the AEER.				
13. Bypass APRM #1.	Contacts the control room to have the NSO bypass APRM #1.	_____	_____	_____
CUE: APRM #1 is bypassed.				

PERFORMANCE CHECKLIST		STANDARDS	SAT	UNSAT	Comment #
14.	Install jumpers to bypass secondary containment isolations and SBGT.	Contacts the control room to have the NSO install jumpers.	_____	_____	_____
CUE: The jumpers have been installed.					
15. *	Unlock FROM MCC 25-2 RPS BUS RESERVE breaker.	FROM MCC 25-2 RPS BUS RESERVE breaker unlocked.	_____	_____	_____
CUE: The locking mechanism is in the position you described.					
16. *	Open 2A M-G SET FEED TO 2B RPS BUS NORMAL breaker.	2A M-G SET FEED TO 2B RPS BUS NORMAL breaker moved to off position.	_____	_____	_____
CUE: The breaker is in the position you described.					
17. *	Wait 1 second, then close FROM MCC 25-2 RPS BUS RESERVE breaker on RPS Bus 2B.	FROM MCC 25-2 RPS BUS RESERVE breaker closed after a 1 second wait.	_____	_____	_____
CUE: The breaker is in the position you described.					
18.	Stop RPS MG A by taking MOTOR STARTING switch to TRIP.	Rotate RPS MG A MOTOR STARTING switch to TRIP.	_____	_____	_____
NOTE: Green and Yellow lights are illuminated (due to MG Set trip).					
CUE: The switch is in the condition you described.					
19.	Place VOLTMETER TRANSFER switch in BUS.	VOLTMETER TRANSFER switch placed in BUS.	_____	_____	_____
CUE: The switch is in the condition you described.					

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
20. Verify AC VOLTS is 111 to 123 volts.	AC VOLTS verified between 111 to 123 volts.	_____	_____	_____
CUE: If correct meter read, then “meter reads 120 volts”, otherwise “meter reads as is”.				
NOTE: Examinee should inform the Control Room that transfer of RPS Bus B is complete through step G.3.p at this time and the rest of the procedure needs to be completed in the Control Room.				
21. Notify Unit 2 Unit Supervisor that the half scram can be reset.	Unit 2 Unit Supervisor notified.	_____	_____	_____
CUE: Acknowledge report.				
	END			

JPM Stop Time:_____

Job Performance Measure (JPM)

Operator's Name: _____

Job Title: RO ☐ SRO ☐

JPM Title: Transfer RPS to the Reserve Power Supply
JPM Number: S-N-k Revision Number: 02
Task Number and Title: 212L001, Perform RPS Power Supply Operations

K/A Number and Importance: 212000.A2.02 3.7 / 3.9

Suggested Testing Environment: In-Plant

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: DOP 0500-03, rev 35

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 an extra NSO.
2. Unit 2 was at 70% power when the 2A RPS MG Set tripped.

INITIATING CUE

1. You have been directed by the Unit 2 Unit Supervisor to perform the in-plant actions to transfer the Unit RPS Bus B from its NORMAL to RESERVE power supply in accordance with DOP 0500-03, “RPS Power Supply Operation”, Step G.3.
2. All applicable prerequisites have been met.
3. The Control Room NSO will install jumpers as needed.
4. Inform the Unit 2 Unit Supervisor when the half scram can be reset.