

# **Exelon Nuclear**

## **Job Performance Measure**

Locally Pull ARI Fuses to Reset ATWS/ARI Circuit

JPM Number: S-N-i

Revision Number: 06

Date: 10/07

**Developed By:** \_\_\_\_\_

**Instructor**

\_\_\_\_\_

**Date**

**Approved By:** \_\_\_\_\_

**Facility Representative**

\_\_\_\_\_

**Date**

## **Job Performance Measure (JPM)**

### **Revision Record (Summary)**

<b>Revision 01</b>	Update JPM to new format.
<b>Revision 02</b>	Change task title to "Locally Pull ARI Fuses to Reset ATWS/ARI Circuit.
<b>Revision 03</b>	Update JPM to new format.
<b>Revision 04</b>	Update JPM to new format.
<b>Revision 05</b>	Update JPM to new format.
<b>Revision 06</b>	Revised to current procedure revision for ILT 07-1 NRC Exam.

## **Job Performance Measure (JPM)**

### **SIMULATOR SETUP INSTRUCTIONS**

1. None, this JPM is performed in the plant.

## **Job Performance Measure (JPM)**

### **INITIAL CONDITIONS**

1. You are the Unit 2 Aux NSO.
2. Unit 3 has experienced an ATWS condition, with reactor power ~35%.
3. No high pressure injection systems are available with the exception of BOTH CRD pumps.
4. Reactor water level is –70 inches AND dropping very slowly.
5. Unit 3 Unit Supervisor has ordered repeated Scram / Resets by defeating RPS logic.
6. ARI has NOT reset as indicated by annunciator 903-5 A-8, ATWS CH A/B TRIP being in an alarm condition.
7. NO other actions have been taken in accordance with DEOP 0500-05.

### **INITIATING CUE**

1. Unit 3 Unit Supervisor has directed you to pull Unit 3 ARI fuses in support of repeated Scram / Resets effort in accordance with DEOP 0500-05.
2. Inform the Unit 3 Unit Supervisor when the task is complete.

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**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.

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## Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<b><u>NOTE:</u></b> Provide the Examinee the provided copy of DEOP 0500-05.				
1. Proceed to step G.3 of the procedure.	LOCATES step G.3			
2. Obtain appropriate equipment from the Control Room DEOP Equipment Storage Cabinet.	The DEOP Storage Cabinet key must be obtained from the Unit Supervisor. Do NOT allow examinee to remove the equipment from the DEOP Storage Locker. Lock cabinet and return key to Unit Supervisor PRIOR to leaving the Control Room. Identifies electrical switching cloak, gloves, and safety glasses. Checks for integrity of equipment and dons all equipment. Identifies equipment labeled Unit 2 DEOP 500-05 Alternate insertion of Control Rods, STEP G.3.b : Pull ARI Fuses: fuse puller.	_____	_____	_____
<b><u>NOTE:</u></b> Obtain permission from the Unit 3 Unit Supervisor prior to proceeding to the AEER. Ensure the Examinee SIMULATES (does NOT perform any fuse pulling). Fuses in both 2203-70A AND 2203-70B panels are labeled on the inside of the panel doors ONLY. BOTH fuse labels are identified with a purple DEOP tag next to them. Examinees in the past have counted how many fuses up from the bottom fuse it is, before they attempt to pull the ARI fuses.				
3. Proceed to 2203-70A panel.	Locates 2203-70A panel in AEER.	_____	_____	_____

### **Job Performance Measure (JPM)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
* 4. In panel 2203-70A, remove fuse F20A.	Locates and pulls fuse F20A in 2203-70A panel (8 up from the bottom fuse).	_____	_____	_____
<p style="text-align: center;"><b><u>CUE:</u></b> Fuse F20A has been pulled.</p>				
5. Proceed to 2203-70B panel.	Locates 2203-70B panel in AEER.	_____	_____	_____
* 6. In panel 2203-70B, remove fuse F20B.	Locates and pulls fuse F20B in 2203-70A panel (8 up from the bottom fuse).	_____	_____	_____
<p style="text-align: center;"><b><u>CUE:</u></b> Fuse F20B has been pulled.</p>				
7. Places fuses in fuse bag, labels the bag and places it in fuse storage cabinet in the WEC.	Examinee indicates he/she would place fuses in labeled fuse bag and place in storage cabinet.			
8. Informs Unit 3 Unit Supervisor task has been completed.	Unit 3 Supervisor notified.	_____	_____	_____
<p style="text-align: center;"><b><u>CUE:</u></b> Acknowledge report of task completion.</p>				
	END			

**JPM Stop Time:**\_\_\_\_\_

## **Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_

Job Title: RO ☐ SRO ☐

JPM Title: Locally Pull ARI Fuses to Reset ATWS/ARI Circuit

JPM Number: S-N-i

Revision Number: 06

Task Number and Title: 295L164, Locally pull ARI fuses to reset ATWS/ARI circuit

K/A Number and Importance: 295037.EA.1.03 4.1 / 4.1

**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:** 12 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** DEOP 0500-05, Rev 15

### **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: \_\_\_\_\_  
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Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Job Performance Measure (JPM)**

### **INITIAL CONDITIONS**

1. You are the Unit 2 Aux NSO.
2. Unit 3 has experienced an ATWS condition, with reactor power ~35%.
3. No high pressure injection systems are available with the exception of BOTH CRD pumps.
4. Reactor water level is -70 inches AND dropping very slowly.
5. Unit 3 Unit Supervisor has ordered repeated Scram / Resets by defeating RPS logic.
6. ARI has NOT reset as indicated by annunciator 903-5 A-8, ATWS CH A/B TRIP being in an alarm condition.
7. NO other actions have been taken in accordance with DEOP 0500-05.

### **INITIATING CUE**

1. Unit 3 Unit Supervisor has directed you to pull Unit 3 ARI fuses in support of repeated Scram / Resets effort in accordance with DEOP 0500-05.
2. Inform the Unit 3 Unit Supervisor when the task is complete.



# **Exelon Nuclear**

## **Job Performance Measure**

Manual Fill of Unit 3 Emergency Diesel Generator Day Tank

JPM Number: P-C-j

Revision Number: 00

Date: 10/07

**Developed By:** \_\_\_\_\_

**Instructor**

\_\_\_\_\_

**Date**

**Approved By:** \_\_\_\_\_

**Facility Representative**

\_\_\_\_\_

**Date**

## **Job Performance Measure (JPM)**

### **Revision Record (Summary)**

<b>Revision 00</b>	New JPM developed for ILT 07-1 NRC Exam.
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## **Job Performance Measure (JPM)**

### **SIMULATOR SETUP INSTRUCTIONS**

1. None, this JPM is performed in the plant.

## **Job Performance Measure (JPM)**

### **INITIAL CONDITIONS**

1. You are the Unit 3 Aux NSO.
2. Annunciator 903-8 G-7, Unit 3 Diesel Generator Day Tank Level HI / LO, has just annunciated.

### **INITIATING CUE**

1. The Unit Supervisor has directed you to check the Unit 3 Diesel Generator Fuel Oil Day Tank level AND refill if necessary utilizing DOA 6600-01.
2. Report to the Unit Supervisor when finished.

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**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.

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## Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<b><u>NOTE:</u></b> Provide examinee with a current copy of DOA 6600-01.				
1. Examinee should proceed to the Unit 3 Diesel Generator Room.	LOCATES U-3 D/G Room.	_____	_____	_____
<b><u>NOTE:</u></b> A DS key is required to enter the Diesel Generator Room. Key may be obtained in the WEC.				
2. Examinee checks the level in the D/G Fuel Oil Day Tank.	OBSERVES day tank sightglass level and determines day tank needs filling.	_____	_____	_____
<b><u>CUE:</u></b> The level in the D/G Day Tank is at the bottom end of on the sight glass.				
<b><u>NOTE:</u></b> Normal level is 43".				
3. Examinee proceeds to attach A of procedure DOA 6600-1.	LOCATES step D.4.	_____	_____	_____
4. Verify that power is available to the DIESEL FUEL OIL TRANSFER PUMP 3.	VERIFIES power available, by local indicating lights illuminated.	_____	_____	_____
<b><u>CUE:</u></b> The GREEN LIGHT is illuminated.				
* 5. Start the Fuel Oil Transfer Pump by <u>holding</u> local Test Switch in the ON position.	<u>HOLDS</u> 3-5203 U3 Diesel Oil Transfer Pp c/s in ON position.	_____	_____	_____
<b>BEGIN ALTERNATE PATH</b>				

## Job Performance Measure (JPM)

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<b><u>CUE:</u></b> Inform Examinee that the pump is running. IF Examinee has NOT asked for annunciator clearing or inspected the sightglass, <u>5 minutes after starting transfer pump</u> , call as the Control Room and ask: "have you started filling the day tank yet"? As the Examinee inspects the sightglass level, inform him/her that the level is at the bottom end of on the sight glass (not increasing) (3-5299-212 valve NOT open).				
* 6. Checks the level in the fuel oil day tank.	OBSERVES sight glass and/or REQUESTS annunciator 903-8 G-7 status.	_____	_____	_____
* 7. Opens 3-5299-212 D/G FUEL TRANSFER PMP TO D/G DAY TANK valve.	Turns valve to the counter-clockwise position.	_____	_____	_____
* 8. Start the Fuel Oil Transfer Pump by <u>holding</u> local Test Switch in the ON position.	<u>HOLDS</u> 3-5203 U3 Diesel Oil Transfer Pp c/s in ON position.	_____	_____	_____
* 9. Checks the level in the fuel oil day tank.	OBSERVES sight glass and/or REQUESTS annunciator 903-8 G-7 status.	_____	_____	_____
<b><u>CUE:</u></b> The day tank level is 10" from the top of the sight glass AND/OR the NSO says Control Room alarm 903-8 G-7 has reset.				
10. Reports to the Unit 3 Supervisor the D/G Day Tank level is normal.	Unit 3 Supervisor notified.	_____	_____	_____
<b><u>CUE:</u></b> Acknowledge report of task completion.				
END				

JPM Stop Time: \_\_\_\_\_

## **Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_

Job Title: RO ☐ SRO ☐

JPM Title: Manual Fill of the Unit 3 EDG Day Tank

JPM Number: S-N-j

Revision Number: 00

Task Number and Title: 264LN00414, Discuss the steps involved in filling of Diesel Generator Day Tanks with Diesel Fuel Oil Storage Tank Transfer Pumps.

K/A Number and Importance: 264000.A1.02 2.2\* / 2.3

(Per discussion the low IR is used, due to this being an OPEX event at Dresden Station)

**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:** 14 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** DOA 6600-01 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: \_\_\_\_\_

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Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Job Performance Measure (JPM)**

### **INITIAL CONDITIONS**

1. You are the Unit 3 Aux NSO.
2. Annunciator 903-8 G-7, Unit 3 Diesel Generator Day Tank Level HI / LO, has just annunciated.

### **INITIATING CUE**

1. The Unit Supervisor has directed you to check the Unit 3 Diesel Generator Fuel Oil Day Tank level AND refill if necessary utilizing DOA 6600-01.
2. Report to the Unit Supervisor when finished.



# **Exelon Nuclear**

## **Job Performance Measure**

Valve in Control Room Emergency Breathing Air Supply

JPM Number: S-N-k

Revision Number: 10

Date: 10/07

**Developed By:** \_\_\_\_\_

**Instructor**

\_\_\_\_\_

**Date**

**Approved By:** \_\_\_\_\_

**Facility Representative**

\_\_\_\_\_

**Date**

## **Job Performance Measure (JPM)**

### **Revision Record (Summary)**

<b>Revision 08</b>	Update JPM to new format.
<b>Revision 09</b>	Update JPM to new format.
<b>Revision 10</b>	Revised to current procedure revision for ILT 07-1 NRC Exam.

## **Job Performance Measure (JPM)**

### **SIMULATOR SETUP INSTRUCTIONS**

1. None, this JPM is performed in the plant.

## **Job Performance Measure (JPM)**

### **INITIAL CONDITIONS**

1. You are the Unit 3 Aux NSO.
2. Control Room personnel have noticed a pungent odor in the Control Room.
3. The Control Room Ventilation is NOT operating properly and the smell is getting worse.
4. The Unit 3 Unit Supervisor has evacuated ALL non-essential personnel from the Control Room and has directed all the NSOs to don SCBAs until the Control Room Emergency Air system can be valved in.
5. The Control Room Emergency Air system is currently in the STANDBY condition IAW DOP 4650-01.

### **INITIATING CUE**

1. The Unit 3 Unit Supervisor has directed you to place the Control Room Emergency Breathing Air System Main Bank in operation in accordance with DOP 4650-01 step G.3.
2. Inform the Unit 3 Supervisor when the task is complete.

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**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.

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## Job Performance Measure (JPM)

JPM Start Time: \_\_\_\_\_

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
<p><b><u>NOTE:</u></b></p> <p>Provide examinee with a current copy of DOP 4650-01.</p> <p>A DS key is required for Unit 2 Battery Room entrance.</p>				
1. Proceed to Emergency Breathing Air manifold.	LOCATES Emergency Breathing Air manifold in Unit 2 Battery Room.	_____	_____	_____
2. Proceed to step G.3 of the procedure.	LOCATES procedure step G.3.	_____	_____	_____
3. Verify the following: <ul style="list-style-type: none"> <li>• LP-1 CLOSED</li> <li>• LP-2 CLOSED</li> <li>• LP-3 CLOSED</li> <li>• LP-4 CLOSED</li> </ul>	VERIFIES valve handle perpendicular to valve body for: <ul style="list-style-type: none"> <li>• LP-1</li> <li>• LP-2</li> <li>• LP-3</li> <li>• LP-4</li> </ul>	_____	_____	_____
* 4. OPEN all Main Bank Cylinder shutoff valves (Cylinders 7 through 13)	Turns handwheels on cylinders 7-13 counter clockwise.	_____	_____	_____
<p><b><u>CUE:</u></b></p> <p>As you described.</p>				
<p><b><u>NOTE:</u></b></p> <p>Count cylinders from left to right to find cylinders 7-13.</p>				
* 5. Check Main Bank pressure.	Reads pressure on PRV 3, CR EMER AIR BREATHING CYL OUTLET PRV. (right side gauge)	_____	_____	_____
<p><b><u>CUE:</u></b></p> <p>If pressure is &lt; 300 psig, point to 2000 psig, on the gauge, and inform examinee pressure is here.</p>				
<p><b><u>NOTE:</u></b></p> <p>Have examinee read actual pressure.</p>				

### **Job Performance Measure (JPM)**

PERFORMANCE CHECKLIST	STANDARDS	SAT	UNSAT	Comment #
* 6. Pressurize the supply manifold from the Main Bank by opening LP-3, CR EMERG AIR BREATHING CYL SV.	OPENS valve LP-3 by turning valve handle counter clockwise ¼ turn so handle is in-line with valve body.	_____	_____	_____
<b><u>CUE:</u></b> As you described.				
7. Verify pressure regulator PRV-3 is maintaining manifold pressure >65 psig and <80 psig.	VERIFIES manifold pressure between 65 and 80 psig as read on CR EMER AIR BREATHING CYL OUTLET PRV. (left side gauge)	_____	_____	_____
<b><u>CUE:</u></b> If pressure is out of spec, point to 70 psig, on the gauge, and inform examinee pressure is here.				
<b><u>NOTE:</u></b> Have examinee read actual pressure.				
8. Reports to the Unit 3 Supervisor that the Control Room Emergency Breathing Air System Main Bank is in operation.	Unit 3 Supervisor notified.	_____	_____	_____
<b><u>CUE:</u></b> Acknowledge report of task completion.				
END				

**JPM Stop Time:**\_\_\_\_\_

## **Job Performance Measure (JPM)**

Operator's Name: \_\_\_\_\_

Job Title: RO ☐ SRO ☐

JPM Title: Valve in Control Room Emergency Breathing Air Supply

JPM Number: S-N-k

Revision Number: 10

Task Number and Title: 279M001, Valve in Control Room Breathing Air Supply

K/A Number and Importance: 290003.A2.02 3.1 / 3.4

**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:** 15 minutes **Actual Time Used:** \_\_\_\_\_ minutes

**References:** DOP 4650-01 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: \_\_\_\_\_  
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\_\_\_\_\_

Evaluator's Name: \_\_\_\_\_ (Print)

Evaluator's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

## **Job Performance Measure (JPM)**

### **INITIAL CONDITIONS**

1. You are the Unit 3 Aux NSO.
2. Control Room personnel have noticed a pungent odor in the Control Room.
3. The Control Room Ventilation is NOT operating properly and the smell is getting worse.
4. The Unit 3 Unit Supervisor has evacuated ALL non-essential personnel from the Control Room and has directed all the NSOs to don SCBAs until the Control Room Emergency Air system can be valved in.
5. The Control Room Emergency Air system is currently in the STANDBY condition IAW DOP 4650-01.

### **INITIATING CUE**

1. The Unit 3 Unit Supervisor has directed you to place the Control Room Emergency Breathing Air System Main Bank in operation in accordance with DOP 4650-01 step G.3.
2. Inform the Unit 3 Supervisor when the task is complete.