

JPM NO JC076.007

Perform ATTACHMENT NO SW PUMPS

Revision #: 0

Review Date:

Location: Simulator

Estimated Time (minutes): 10.00

Candidate: \_\_\_\_\_

Evaluator: \_\_\_\_\_

Actual Time: \_\_\_\_\_

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Trainee Performance: Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Trainee: \_\_\_\_\_

Instructor: \_\_\_\_\_

Submitted By \_\_\_\_\_ Date \_\_\_\_\_

Reviewed By \_\_\_\_\_ Date \_\_\_\_\_

NOTE

THE EVALUATOR WILL EXPLAIN THE JPM INITIAL CONDITIONS AND PROVIDE CLARIFICATION AS REQUIRED. THE EXAMINEE MAY USE ANY CONTROLLED COPY REFERENCES THAT ARE NORMALLY AVAILABLE IN THE CONTROL ROOM, INCLUDING LOGS. MAKE ALL WRITTEN REPORTS, ORAL REPORTS, AND LOG ENTRIES AS IF THE EVOLUTION WAS ACTUALLY BEING PERFORMED. THE EVALUATOR WILL BE TAKING NOTES. ASK FOR CLARIFICATION OF JPM REQUIREMENTS PRIOR TO THE BEGINNING

**Initial Conditions:**

Option 1: The plant was at 100% power when all SW pumps tripped and could not be restarted. The crew tripped the Reactor. The E-0 immediate actions have been performed. The crew has just entered ES-0.1, "REACTOR TRIP RESPONSE."

Option 2: The plant was at 100% power when Alarm L-12, "Condenser Pit or Screenhouse High Level 6" was received followed by L-15 and L-23, "Bus 17/18 Undervoltage" and L-5, "Safeguard Bus Main Breaker Overcurrent Trip". The E-0 immediate actions have been performed. The crew has just entered ES-0.1, "REACTOR TRIP RESPONSE."

**Initiating Cues :**

The CRF directs you to perform Att-2.4 "ATTACHMENT NO SW PUMPS" while the rest of the crew continues with ES-0.1 "REACTOR TRIP RESPONSE".

**Description:** Respond to a Total Loss of SW

**JPM Tasks**

**Task ID:** 076-004-05-01

**Task Standards**

In accordance with the procedure

**Tools :**

Installed indication

Procedures

Installed switches/pushbuttons

**Terminating Cues**

Task Completion

**References :**

<u>ID</u>	<u>Description</u>	<u>Review Date</u>	<u>Ref Flag</u>
PRATT      ATT-2.4	ATTACHMENT NO SW PUMPS		<input type="checkbox"/>

**Safety Considerations :**

**Consequences of Inadequate Performance:**

Equipment Damage

Thermal design limit challenge

Procedure Violation

**General Comments :**

Simulator setup with Reactor tripped from 100% power, Option 1 - All service water pumps tripped, Option 2 - bus 17 & 18 de-energized and both D/Gs running unloaded. (Malf CRC03A, 200,000; Malf EDS 04C, 04D)

**Performance Checklist**

1	<b>Element :</b> Cue	<b>Conditions :</b> CUE: Give examinee a copy of ATT-2.4 ATTACHMENT NO SW PUMPS.	<b>Standards :</b>												
<b>Comments :</b>															
Satisfactory <input type="checkbox"/>		Unsatisfactory <input type="checkbox"/>													
<table border="0"> <tr> <td style="vertical-align: top; padding-right: 10px;">2</td> <td style="vertical-align: top; padding-right: 20px;"> <b>Element :</b>            Note - Steps 1 through 5 should            be performed promptly to avoid            equipment damage.         </td> <td style="vertical-align: top; padding-right: 20px;"> <b>Conditions :</b> </td> <td style="vertical-align: top;"> <b>Standards :</b>            Ensure examinee reads note            and performs steps in a            prompt manner.         </td> </tr> <tr> <td colspan="4" style="padding-top: 10px;"> <b>Comments :</b> </td> </tr> <tr> <td colspan="2" style="text-align: right; padding-right: 20px;">           Satisfactory <input type="checkbox"/> </td> <td colspan="2" style="text-align: right; padding-right: 20px;">           Unsatisfactory <input type="checkbox"/> </td> </tr> </table>				2	<b>Element :</b> Note - Steps 1 through 5 should be performed promptly to avoid equipment damage.	<b>Conditions :</b>	<b>Standards :</b> Ensure examinee reads note and performs steps in a prompt manner.	<b>Comments :</b>				Satisfactory <input type="checkbox"/>		Unsatisfactory <input type="checkbox"/>	
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*5	<b>Element :</b> <u><b>CRITICAL</b></u> Pull stop the affected D/G.	<b>Conditions :</b> D/Gs can be shutdown in any order.	<b>Standards :</b> Locates control switch for A D/G and takes switch to pull stop.												
<b>Comments :</b>															
Satisfactory <input type="checkbox"/>		Unsatisfactory <input type="checkbox"/>													

- \*6 **Element :** **CRITICAL** **Conditions :** **Standards :**  
Immediately depress voltage shutdown pushbutton for A D/G  
Locates voltage shutdown pushbutton for A D/G and immediately depresses pushbutton.
- Comments :**
- Satisfactory ☐ Unsatisfactory ☐
- 
- \*7 **Element :** **CRITICAL** **Conditions :** **Standards :**  
Pull stop the affected D/G.  
Locates control switch for B D/G and takes switch to pull stop.
- Comments :**
- Satisfactory ☐ Unsatisfactory ☐
- 
- \*8 **Element :** **CRITICAL** **Conditions :** **Standards :**  
Immediately depress voltage shutdown pushbutton for B D/G  
Locates voltage shutdown pushbutton for B D/G and immediately depresses pushbutton.
- Comments :**
- Satisfactory ☐ Unsatisfactory ☐
- 
- 9 **Element :** **Conditions :** **Standards :**  
Directs an AO to align alternate cooling to both D/Gs using ER-D/G.2.  
Contacts AO and directs AO to align alternate cooling to D/Gs per ER-D/G.2.
- Comments :**
- Satisfactory ☐ Unsatisfactory ☐
- 
- 10 **Element :** **Conditions :** **Standards :**  
Determine if Bus 17 has been potentially damaged.  
Based on initial conditions determines that Bus 17 has been possibly damaged, Directs AO to locally open breaker 1B3, B D/G Isol Bkr to Bus 17 in B D/G room.

Comments :

Satisfactory

☐

Unsatisfactory

☐

11

**Element :**Close Letdown isolation,  
AOV-427**Conditions :****Standards :**Locates control switch for  
AOV-427 and places control  
switch in close.

Comments :

Satisfactory

☐

Unsatisfactory

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12

**Element :**

Close excess letdown, HCV-123

**Conditions :****Standards :**Locates manual controller for  
HCV-123 and adjusts ( or  
verifies) controller has "0"  
demand and no pressure  
indicated on PI-121.

Comments :

Satisfactory

☐

Unsatisfactory

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\*13

**Element :** **CRITICAL**

Close both MSIVs.

**Conditions :**CUE: The other operator will  
control temperature using ARV's.**Standards :**Locates control switch for  
MSIVs (AOV-3517 &  
AOV-3516) and closes both  
MSIVs.

Comments :

Satisfactory

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Unsatisfactory

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\*14

**Element :** **CRITICAL**Pull stop control switches for both  
MDAFW pumps.**Conditions :****Standards :**Locates control swithes for A  
and B AFW pumps and  
places both switches in pull  
stop.

Comments :

Satisfactory

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Unsatisfactory

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- \*15 **Element :** **CRITICAL** **Conditions :** **Standards :**  
Pull stop control switches for all  
four CNMT Recirc Fans. Locates control switches for  
all four CNMT Recirc Fans  
and places switches in pull  
stop.
- Comments :**
- Satisfactory** ☐ **Unsatisfactory** ☐
- 
- 16 **Element :** **Conditions :** **Standards :**  
Pull stop control switches for both  
MFW pumps. Locates control switches for  
both MFW pumps and places  
switches in pull stop.
- Comments :**
- Satisfactory** ☐ **Unsatisfactory** ☐
- 
- 17 **Element :** **Conditions :** **Standards :**  
Pull stop control switches for  
Condensate Pumps. Locates control switches for  
Condensate pumps and places  
all three switches in pull stop.
- Comments :**
- Satisfactory** ☐ **Unsatisfactory** ☐
- 
- 18 **Element :** **Conditions :** **Standards :**  
Monitor CCW temperature. Option 1) Cue: No further actions Monitors CCW temperature  
and determines temperature  
less than 125F. No action  
needs to be taken to stop  
CCW.
- Comments :**
- Satisfactory** ☐ **Unsatisfactory** ☐
- 
- 19 **Element :** **Conditions :** **Standards :**  
CUE: Report to examinee as AO  
that alternate cooling has been  
aligned to "A" D/G. Examinee will acknowledge  
that alternate cooling has  
been aligned to "A" D/G and  
returns to step 2.e of Att-2.4.

**Comments :**

Satisfactory

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Unsatisfactory

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20

**Element :**

Place "A" D/G control switch to Auto

**Conditions :****Standards :**

Locates and places control switch for "A" D/G to AUTO.

**Comments :**

Satisfactory

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Unsatisfactory

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21

**Element :**

Depress "A" D/G RESET and D/G FEILD RESET pushbuttons.

**Conditions :****Standards :**

Locates and depresses the "D/G RESET" and D/G FEILD RESET" for "A" D/G.

**Comments :**

Satisfactory

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Unsatisfactory

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22

**Element :**

Observe restart of "A" D/G

**Conditions :****Standards :**

Observe/verify auto restart of "A" D/G by observing frequency and voltage on "A" D/G.

**Comments :**

Satisfactory

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Unsatisfactory

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23

**Element :**

CUE: No further action.

**Conditions :****Standards :****Comments :**

Satisfactory

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Unsatisfactory

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**JPM Questions****Question****Answer****References**

<b>Reference Type</b>	<b>Reference ID</b>	<b>Description</b>	<b>Ref Flag</b>
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JPM NO JR062.026

Restore Power to One Train from D/G per AP-ELEC.3

Revision #: 2

Review Date: 9/16/2004

Location: Simulator

Estimated Time (minutes): 14.00

Candidate: \_\_\_\_\_

Evaluator: \_\_\_\_\_

Actual Time: \_\_\_\_\_

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Trainee Performance: Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Trainee: \_\_\_\_\_

Instructor: \_\_\_\_\_

Submitted By \_\_\_\_\_ Date \_\_\_\_\_

Reviewed By \_\_\_\_\_ Date \_\_\_\_\_

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**Initial Conditions:**

The plant is in a refueling outage. RCS Loop Level is currently 84 inches with RCS temperature less than 100 degrees. The plant has just experienced a loss of offsite power. D/G "A" started and loaded onto Bus 18, but did not load onto Bus 14. D/G "B" did not start, attempts to start from the MCB did not work. Procedure AP-ELEC.3, LOSS OF 12A AND/OR 12B TRANSFORMER (BELOW 350 DEGREES) has been entered.

**Initiating Cues :**

You have been directed to attempt to restore power to Bus 14 from D/G "A" per ER-D/G.1.

**Description:** Restore Power to One Train of AC Emergency Buses with Emergency D/G (CT ER

**JPM Tasks**

**Task ID:** 062-033-05-01A

**Task Standards**

Bus 14 energized by "A" Diesel Generator

**Tools :**

**Terminating Cues**

**References :**

<u>ID</u>		<u>Description</u>	<u>Review Date</u>	<u>Ref Flag</u>
PRAP	AP-ELEC.3	LOSS OF 12A AND/OR 12B TRANSFORMER (BELOW 350 F)		<input type="checkbox"/>
PRER	ER-D/G.1	RESTORING D/GS		<input type="checkbox"/>

**Safety Considerations :**

**Consequences of Inadequate Performance:**

**General Comments :**

Start sim in IC-2, 84 inches, RHR inservice. Insert MALF GEN04B (TRIP ALL COND) for D/G "B". Insert MALF GEN09A to fail Bus 14 breaker Auto Close. Insert MALF EDS06 (FAST) for Loss of Offsite Power. Reset Control Room lights on inside MCB, ensure Service Water Pump has auto started, then freeze simulator to give Initial Conditions and Cue.

**Performance Checklist**

- |   |  |  |  |
|---|--|--|--|
| 1 | <b>Element :</b><br>Review procedure ER-D/G.1.                               | <b>Conditions :</b>  | <b>Standards :</b><br>Determine Section 4.4 provides needed direction.   |
|   | <b>Comments :</b>  |  |  |
|   | <b>Satisfactory</b>  | <input type="checkbox"/>   | <b>Unsatisfactory</b> <input type="checkbox"/>   |
| 2 | <b>Element :</b><br>Verify D/G "A" output voltage approximately 480 volts.   | <b>Conditions :</b>  | <b>Standards :</b><br>Check MCB indications for proper voltage.  |
|   | <b>Comments :</b>  |  |  |
|   | <b>Satisfactory</b>  | <input type="checkbox"/>   | <b>Unsatisfactory</b> <input type="checkbox"/>   |
| 3 | <b>Element :</b><br>Check for bus fault indications.                         | <b>Conditions :</b><br>CUE: If examinee requests Electrician or AO to locally check bus; cue that no relays are tripped and no indications of damage are seen. | <b>Standards :</b><br>Check MCB alarm panels for fault indications, determine no faults other than loss of offsite power are indicated. (Annunciators L-5 and L-13 are main indications that no fault occurred.) |
|   | <b>Comments :</b>  |  |  |
|   | <b>Satisfactory</b>  | <input type="checkbox"/>   | <b>Unsatisfactory</b> <input type="checkbox"/>   |
| 4 | <b>Element :</b><br>Ensure all bus tie breakers are open.                    | <b>Conditions :</b>  | <b>Standards :</b><br>Check MCB for open indications:<br>- Bus 13-Bus 14 tie<br>- Bus 16-Bus 14 tie<br>- Bus 17-Bus 18 tie   |
|   | <b>Comments :</b>  |  |  |
|   | <b>Satisfactory</b>  | <input type="checkbox"/>   | <b>Unsatisfactory</b> <input type="checkbox"/>   |
| 5 | <b>Element :</b><br>Place Bus 14 normal supply breaker to after trip on MCB. | <b>Conditions :</b>  | <b>Standards :</b><br>Same as element.   |

**Comments :**

Satisfactory

☐

Unsatisfactory

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6

**Element :**

Press Overcurrent Reset for Bus 14.

**Conditions :****Standards :**Locate pushbutton (inside MCB).  
Depress pushbutton.**Comments :**

Satisfactory

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Unsatisfactory

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**Element :**

Check auto voltage control properly set.

**Conditions :****Standards :**Verify Auto control selected on MCB selector switch.  
Verify 480 volts output.**Comments :**

Satisfactory

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Unsatisfactory

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**Element :****CRITICAL**  
Place D/G "A" synchroscope switch to Bus 14 position.**Conditions :****Standards :**

Same as element.

**Comments :**

Satisfactory

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Unsatisfactory

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**Element :****CRITICAL**  
Manually close D/G "A" feed to Bus 14.**Conditions :**

CUE: No further action.

**Standards :**

Places D/G A feed to Bus 14 to close. Verifies breaker closes.

**Comments :**

Satisfactory

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Unsatisfactory

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**JPM Questions****Question****Answer****References**

<b>Reference Type</b>	<b>Reference ID</b>	<b>Description</b>	<b>Ref Flag</b>
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JPM NO JR026.001

Secure Containment Spray

Revision #: 6

Review Date: 9/15/2004

Location: Simulator

Estimated Time (minutes): 5.00

Candidate: \_\_\_\_\_

Evaluator: \_\_\_\_\_

Actual Time: \_\_\_\_\_

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Trainee Performance: Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Trainee: \_\_\_\_\_

Instructor: \_\_\_\_\_

Submitted By \_\_\_\_\_ Date \_\_\_\_\_

Reviewed By \_\_\_\_\_ Date \_\_\_\_\_



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**Initial Conditions:**

The plant was operating at 100% power and experienced a large break LOCA followed by a reactor trip and SI. All necessary equipment functioned properly.

**Initiating Cues :**

The plant experienced a large break LOCA. All steps of E-0 and E-1 have been completed up to step 13. The Shift Supervisor directs you to secure Containment Spray per Step 13 of E-1.

**Description:** Secure Containment Spray (JR026.001)

**JPM Tasks**

**Task ID:** 026-008-05-01A

**Task Standards**

Secure Containment Spray Pumps and System.

**Tools :**

**Terminating Cues**

**References :**

<u>ID</u>	<u>Description</u>	<u>Review Date</u>	<u>Ref Flag</u>
PRE E-1	LOSS OF REACTOR OR SECONDARY COOLANT		<input type="checkbox"/>

**Safety Considerations :**

**Consequences of Inadequate Performance:**

**General Comments :**

Any full power IC. MALF RCS02A, B, C or D (10 000). Complete E-0 and E-1 up to Step 13. Ensure spray energized and Cnmt pressure < 4 psig and NAOH Tank level < 55%. Use Indicator Override SIS37 and set NAOH Tank level to 50%. (IC-52)

**Performance Checklist**

- |    |   |   |   |
|----|---|---|---|
| 1  | <b>Element :</b><br>Obtain a controlled copy of E-1.  | <b>Conditions :</b>                     | <b>Standards :</b><br>Same as element.                            |
|    | <b>Comments :</b>   |   |   |
|    | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/> |   |
| 2  | <b>Element :</b><br>Verify Containment Spray Pumps running.   | <b>Conditions :</b>                     | <b>Standards :</b><br>Same as element.                            |
|    | <b>Comments :</b>   |   |   |
|    | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/> |   |
| 3  | <b>Element :</b><br>Verify Containment pressure less than 4 psig and NAOH Tank level less than 55%. | <b>Conditions :</b>                     | <b>Standards :</b><br>MCB meters                                  |
|    | <b>Comments :</b>   |   |   |
|    | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/> |   |
| *4 | <b>Element :</b> <u><b>CRITICAL</b></u><br>Reset Containment Spray.                                 | <b>Conditions :</b>                     | <b>Standards :</b><br>Depress Containment Spray Reset pushbutton. |
|    | <b>Comments :</b>   |   |   |
|    | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/> |   |
| 5  | <b>Element :</b><br>Verify NaOH flow - no flow.   | <b>Conditions :</b>                     | <b>Standards :</b><br>Check FI-930 no flow.                       |
|    | <b>Comments :</b>   |   |   |
|    | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/> |   |
|    | <b>Element :</b> <u><b>CRITICAL</b></u><br>Stop CS Pumps. Place switches in auto.                   | <b>Conditions :</b>                     | <b>Standards :</b><br>Same as element.                            |

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

\*7

**Element :** **CRITICAL****Conditions :****Standards :**Close spray isolation valves;  
MOV-860A, MOV-860B,  
MOV-860C, MOV-860D.

CUE: No further action.

MCB switches to close.

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

JPM NO JC006.010

Perform SFP-RWST Attachment

Revision #: 4

Review Date: 9/16/2004

Location: Aux Bldg

Estimated Time (minutes): 15.00

Candidate: \_\_\_\_\_

Evaluator: \_\_\_\_\_

Actual Time: \_\_\_\_\_

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Trainee Performance: Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Trainee: \_\_\_\_\_

Instructor: \_\_\_\_\_

Submitted By \_\_\_\_\_ Date \_\_\_\_\_

Reviewed By \_\_\_\_\_ Date \_\_\_\_\_

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**Initial Conditions:**

The plant experienced a LOCA outside of Containment. The LOCA cannot be isolated. Control Room transitioned from ECA-1.2, LOCA OUTSIDE CONTAINMENT, to ECA-1.1, LOSS OF EMERGENCY COOLANT RECIRCULATION.

**Initiating Cues :**

The CRF directs you to transfer water from SFP to the RWST using Attachment ATT-18.0, SFP-RWST.

- ☒ Option 3: Transfer at the Maximum rate (Bypass SFP DIs)
- Option 4: Transfer at Normal Rate (Through the SFP DI)

**Description:** Perform SFP-RWST Attachment (JC006.010)

**JPM Tasks**

**Task ID:** 005-017-05-04A

**Task Standards**

**Tools :**

Key

Safety Glasses

Hard Hat

Hearing Protection

**Terminating Cues**

Trainee Says Task is Completed

Task Completion

**References :**

<u>ID</u>	<u>Description</u>	<u>Review Date</u>	<u>Ref Flag</u>
PRATT      ATT-18.0	ATTACHMENT SFP - RWST		<input type="checkbox"/>

**Safety Considerations :**

Radiological Hazard

**Consequences of Inadequate Performance:**

Insufficient water for injection during a Loss of Emergency Coolant Recirculation.

**General Comments :**

Estimated Time is 15 minutes for Options 1 and 4. Option 2 adds 5 minutes. Option 3 adds 10 minutes.

**Performance Checklist**

1	<b>Element :</b> Note	<b>Conditions :</b> NOTE: Supply student copy of the attachment.  CUE: Simulate you have a locked valve key.	<b>Standards :</b>
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
2	<b>Element :</b> Review attachment.	<b>Conditions :</b>	<b>Standards :</b> Same as element.
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
3	<b>Element :</b> Verify SPF Cooling Lineup.	<b>Conditions :</b> CUE: A SFP Running Option 1: Lower suction in service (Go to Step 11) <u>Option 2</u> : Upper suction in service (Go to Step 4)	<b>Standards :</b> Check SFP Pumps Check SFP Suction Valves
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
4	<b>Element :</b> Obtain copy of S-9A. Review procedure.	<b>Conditions :</b> CUE: Given Examinee Copy	<b>Standards :</b> Same as Element
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
5	<b>Element :</b> Check SFP Level	<b>Conditions :</b> Visual Inspection of Level	<b>Standards :</b> Same as Element
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>



- 6 **Element :** Contact Control about TR 3.7.7 and 3.9.4  
**Conditions :** CUE: Requirements are satisfied sign off Initial Condition  
**Standards :** Same as Element

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- 7 **Element :** Determine Section 5.6 to be performed.  
**Conditions :**  
**Standards :** Same as Element

**Comments :**

Satisfactory

☐

Unsatisfactory

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- 8 **Element :** Verify Pool Temperature  
**Conditions :** Check Pool Temperature < 115 deg F or call MCR to verify.  
CUE: Pool Temp 90 deg F  
**Standards :** Same as Element

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- 9 **Element :** Check level above weir gate bracket  
**Conditions :** CUE: Level above brackets  
**Standards :** Checks level

**Comments :**

Satisfactory

☐

Unsatisfactory

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- \*10 **Element :** CRITICAL  
Open V-782  
**Conditions :** Locate valve  
Simulator opening  
CUE: Valve no longer turns in that direction  
**Standards :** Same as Element

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- \*11 **Element :** CRITICAL  
Close V-781  
**Conditions :** Locates valve  
Simulates closing  
CUE: Valve no longer turns in that direction  
**Standards :** Same as Element

**Comments :**

Satisfactory

☐

Unsatisfactory

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- 
- 12 **Element :** Observe note.  
**Conditions :** CUE:  
OPTION #3 = Transfer at maximum rate.  
OPTION #3 - Proceed to next step.  
OPTION #4 - proceed to step 20. **Standards :** Same as element.  
OPTION #4 = Transfer through SFP DI.

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- 
- \*13 **Element :** **CRITICAL**  
Unlock and close V-804.  
**Conditions :** CUE: Valve is unlocked. Valve no longer turns in that direction.  
CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP HEAT EXCH AREA, ELEV 4  
**Standards :** Locate valve.  
Simulate unlocking and closing.

**Comments :**

Satisfactory

☐

Unsatisfactory

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- 
- \*14 **Element :** **CRITICAL**  
Open V-789.  
**Conditions :** CUE: Valve no longer turns in that direction.  
CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP FILTER ROOM AREA, ELEV 1  
**Standards :** Locate valve.  
Simulate opening valve.

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- \*15 **Element :** **CRITICAL**  
Close V-790.
- Conditions :**  
CUE: Valve no longer turns in that direction.
- Standards :**  
Locate valve.  
Simulate closing valve.

CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP FILTER ROOM AREA, ELEV 1

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- \*16 **Element :** **CRITICAL**  
Close V-796.
- Conditions :**  
CUE: Valve no longer turns in that direction.
- Standards :**  
Locate valve.  
Simulate closing valve.

CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP FILTER ROOM AREA, ELEV 1

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- \*17 **Element :** **CRITICAL**  
Open V-797.
- Conditions :**  
CUE: Valve no longer turns in that direction.
- Standards :**  
Locate valve.  
Simulate opening valve.

CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP FILTER ROOM AREA, ELEV 5

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- \*18 **Element :** **CRITICAL**  
Close V-798A.
- Conditions :**  
CUE: Valve no longer turns in that direction.
- Standards :**  
Locate valve.  
Simulate closing valve.

CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP FILTER ROOM AREA, ELEV 5

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- \*19 **Element :** **CRITICAL** **Conditions :** **Standards :**  
Close V-802. CUE: Valve no longer turns in that direction. Locate valve.  
Simulate closing valve.

CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP FILTER ROOM AREA, ELEV 5

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

- \*20 **Element :** **CRITICAL** **Conditions :** **Standards :**  
Observe caution. Same as element.

**Comments :**

Satisfactory

☐

Unsatisfactory

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- \*21 **Element :** **CRITICAL** **Conditions :** **Standards :**  
Slowly open V-803 and close V-804. CUE OPTION #4: Flow meter reads 60 gpm. Locates valves.  
Simulate unlocking and operating valves.  
CUE OPTION #3: Valves no longer turn in that direction. IF performing OPTION #4, indicate that meter is monitored (for 60 gpm flow)=  
CUE BOTH OPTIONS: Secure transferring water to RWST.  
CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP HEAT EXCH AREA ELEV 4 for both valves

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

\*22 **Element :** **CRITICAL**  
Close V-803.

**Conditions :**

CUE: Valve no longer turns in that direction.

CUE:(If student requests eSOMS location) eSOMS gives valve location at: AB INTER, SFP HEAT EXCH AREA, ELEV 4

Cue: No further actions

**Standards :**

Locate valve.  
Simulate closing valve and locking.

**Comments :**

Satisfactory

☐

Unsatisfactory

☐

JPM NO JR015.006

Install Spare Source Range Drawer (ER-FIRE.1)

Revision #: 5

Review Date: 10/12/2004

Location: In Plant

Estimated Time (minutes): 45.00

Candidate: \_\_\_\_\_

Evaluator: \_\_\_\_\_

Actual Time: \_\_\_\_\_

---

Trainee Performance: Satisfactory \_\_\_\_\_ Unsatisfactory \_\_\_\_\_

Trainee: \_\_\_\_\_

Instructor: \_\_\_\_\_

Submitted By \_\_\_\_\_

Date \_\_\_\_\_

Reviewed By \_\_\_\_\_

Date \_\_\_\_\_

**NOTE**

THE EVALUATOR WILL EXPLAIN THE JPM INITIAL CONDITIONS AND PROVIDE CLARIFICATION AS REQUIRED. THE EXAMINEE MAY USE ANY CONTROLLED COPY REFERENCES THAT ARE NORMALLY AVAILABLE IN THE CONTROL ROOM, INCLUDING LOGS. MAKE ALL WRITTEN REPORTS, ORAL REPORTS, AND LOG ENTRIES AS IF THE EVOLUTION WAS ACTUALLY BEING PERFORMED. THE EVALUATOR WILL BE TAKING NOTES. ASK FOR CLARIFICATION OF JPM REQUIREMENTS PRIOR TO THE BEGINNING OF JPM PERFORMANCE.

**Initial Conditions:**

The plant was operating at 100% power for several months. A fire in the main Control Room forced its evacuation. Approximately 30 minutes later, the Shift Supervisor directs you to install the spare Source Range drawer.

**Initiating Cues :**

A fire in the Control Room forced its evacuation about 1/2 hour ago. The Shift Supervisor directs you to install the spare Source Range drawer per ER-FIRE.1, Attachment 11. Do not manipulate, connect or disconnect any switches or wires.

**Description:** Install Spare Source Range Drawer (ER-FIRE.1) (JR015.006)

**JPM Tasks**

**Task ID:** 015-017-05-01A

**Task Standards :**

In accordance with the procedure

**Tools :**

Procedure

Hard Hat

Hearing Protection

Flash Jacket

Appendix R Tool Pouch

Safety Glasses

Rubber Gloves

**Terminating Cues**

Trainee Says Task is Completed

Task Completion

**References :**

<u>ID</u>	<u>Description</u>	<u>Review Date</u>	<u>Ref Flag</u>
PRER	ER-FIRE.1 ALTERNATE SHUTDOWN FOR CONTROL COMPLEX FIRE		<input type="checkbox"/>

**Safety Considerations :**

Electrical Shock Hazard

**Consequences of Inadequate Performance:**

Inability to determine reactor core shutdown



**General Comments :**

Inform SS.

Appendix "R" Locker Key.

Procedure ER-FIRE.1.

DISCUSS WITH I&C AHEAD OF TIME FOR EQUIPMENT CHECK AFTER PERFORMANCE.

**Performance Checklist**

- |       |   |   |  |
|-------|---|---|--|
| 1     | <b>Element :</b><br>Handout   | <b>Conditions :</b><br>NOTE: Give students an Appendix "R" package. This will include the procedures and Appendix "R" key.<br><br>CUE: Tell student to simulate the radio.  | <b>Standards :</b>   |
|       | <b>Comments :</b>   |   |  |
|       | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/>   |  |
| <hr/> |   |   |  |
| 2     | <b>Element :</b><br>Locate appropriate section of procedure.  | <b>Conditions :</b>   | <b>Standards :</b><br>Attachment 11.   |
|       | <b>Comments :</b>   |   |  |
|       | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/>   |  |
| <hr/> |   |   |  |
| 3     | <b>Element :</b><br>Locate appropriate locker.  | <b>Conditions :</b>   | <b>Standards :</b><br>Same as element.   |
|       | <b>Comments :</b>   |   |  |
|       | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/>   |  |
| <hr/> |   |   |  |
| *4    | <b>Element :</b> <u><b>CRITICAL</b></u><br>Obtain appropriate equipment from locker for SR storage. | <b>Conditions :</b><br>NOTE: For Requal exam it is not necessary to remove cables, but examinee must explain what he would do. A prompt of this order would be appropriate at this point.<br><br>NOTE: Cable tie-offs not critical. | <b>Standards :</b><br>-Rubber gloves<br>-Multi-headed extension<br>-Appendix "R" Source range cables<br>-Electrical safety jacket<br>-Cable tie-offs |
|       | <b>Comments :</b>   |   |  |
|       | Satisfactory <input type="checkbox"/>   | Unsatisfactory <input type="checkbox"/>   |  |
| <hr/> |   |   |  |
| *5    | <b>Element :</b> <u><b>CRITICAL</b></u><br>Run cables per instructions in Attachment 11.            | <b>Conditions :</b><br>NOTE: Requal examinees should not run the cables, but they must explain how it is done.  | <b>Standards :</b><br>Simulate unless for Appendix "R" test or Initial License Class.  |

Comments :

Satisfactory

☐

Unsatisfactory

☐

6

**Element :**Place Source Range Drawer near  
IBELIP Panel.**Conditions :****Standards :**Within reach of extension  
cord.

Comments :

Satisfactory

☐

Unsatisfactory

☐

\*7

**Element :** **CRITICAL**Connect unattached ends of the  
three connectors to Source Range  
Drawer.**Conditions :****Standards :**Simulate connections:  
A to A  
B to B  
C to C

Comments :

Satisfactory

☐

Unsatisfactory

☐

8

**Element :**Don rubber gloves and safety  
jacket.**Conditions :****Standards :**

Same as element.

Comments :

Satisfactory

☐

Unsatisfactory

☐

9

**Element :**In catwalk area disconnect cables  
and connect the ends of the three  
Appendix R Source Range cables  
to Preamp connectors.**Conditions :****Standards :**Simulate connections:  
A to A  
B to B  
C to C

Comments :

Satisfactory

☐

Unsatisfactory

☐

\*10

**Element :** **CRITICAL**

Perform or verify switch lineup.

**Conditions :****Standards :**Done IAW step by step on  
Attachment 11.

Comments :

Satisfactory

☐

Unsatisfactory

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11	<b>Element :</b> Notify SS that Spare Source Range is ready.	<b>Conditions :</b> CUE: > 30 minutes have elapsed since reactor shutdown.	<b>Standards :</b> Same as element.
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
*12	<b>Element :</b> <u><b>CRITICAL</b></u> Plug 2 Source Range Drawer power sources into the multihead extension cords.	<b>Conditions :</b>	<b>Standards :</b> Simulate plugging into IBELIP.
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
*13	<b>Element :</b> <u><b>CRITICAL</b></u> Turn power switches on.	<b>Conditions :</b>	<b>Standards :</b> Simulate turning on power.
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
*14	<b>Element :</b> <u><b>CRITICAL</b></u> Set the High Voltage to 1500V on 556 HVPS.	<b>Conditions :</b>	<b>Standards :</b> Simulate adjusting voltage as directed by procedure.
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>
15	<b>Element :</b> Notify Shift Supervisor.	<b>Conditions :</b> CUE: No further action.	<b>Standards :</b> Simulate using radio to notify SS of task completion.
<b>Comments :</b>			
Satisfactory		<input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>