

JPM NO JC076.007

Perform ATTACHMENT NO SW PUMPS

Revision #: 0

Review Date:

Location: Simulator

Estimated Time (minutes): 10.00

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

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

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

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

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

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

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

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

NOTE

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**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"/>	
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"/>	
	<b>Element :</b> <u><b>CRITICAL</b></u> Trip both RCPs.	<b>Conditions :</b>	<b>Standards :</b> Locates control switches for RCPs and trips both RCPs
	<b>Comments :</b>		
	Satisfactory <input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>	
*4	<b>Element :</b> <u><b>CRITICAL</b></u> Determine if any D/G running without alternate cooling.	<b>Conditions :</b> Option 1) No D/G running (Go to step 11) Option 2) Both D/G running (Go to step 5)	<b>Standards :</b> Same as Element.
	<b>Comments :</b>		
	Satisfactory <input type="checkbox"/>	Unsatisfactory <input type="checkbox"/>	
*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

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

\*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

Unsatisfactory

\*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

Unsatisfactory

- \*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****Unsatisfactory**

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****Unsatisfactory**

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****Unsatisfactory**

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****Unsatisfactory**

23

**Element :**

CUE: No further action.

**Conditions :****Standards :****Comments :****Satisfactory****Unsatisfactory**

**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>  |  |  |
|   | Satisfactory <input type="checkbox"/>  | Unsatisfactory <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>  |  |  |
|   | Satisfactory <input type="checkbox"/>  | Unsatisfactory <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>  |  |  |
|   | Satisfactory <input type="checkbox"/>  | Unsatisfactory <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  |
|   | <b>Comments :</b>  |  |  |
|   | Satisfactory <input type="checkbox"/>  | Unsatisfactory <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

6

**Element :**

Press Overcurrent Reset for Bus 14.

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

Comments :

Satisfactory

Unsatisfactory

7

**Element :**

Check auto voltage control properly set.

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

Comments :

Satisfactory

Unsatisfactory

\*8

**Element :****CRITICAL**

Place D/G "A" synchroscope switch to Bus 14 position.

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

Same as element.

Comments :

Satisfactory

Unsatisfactory

\*9

**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

Unsatisfactory

**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>CRITICAL</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>CRITICAL</u><br>Stop CS Pumps. Place switches in auto.                          | <b>Conditions :</b>                     | <b>Standards :</b><br>Same as element.                            |

Comments :

Satisfactory

Unsatisfactory

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\*7

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

**Conditions :**  
CUE: No further action.

**Standards :**  
MCB switches to close.

Comments :

Satisfactory

Unsatisfactory

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STEP

ACTION/EXPECTED RESPONSE

RESPONSE NOT OBTAINED

**\*13** Monitor If CNMT Spray Should Be Stopped:

- |  |  |
|--|--|
| a. CNMT spray pumps - RUNNING  | a. Go to Step 14.  |
| b. Check the following: <ul style="list-style-type: none"><li>o CNMT pressure - LESS THAN 4 PSIG</li><li>o Sodium hydroxide tank level - LESS THAN 55%</li></ul> | b. Continue with Step 14. <u>WHEN</u> BOTH conditions satisfied, <u>THEN</u> do Steps 13c through f.                             |
| c. Reset CNMT spray  |  |
| d. Check NaOH flow (FI-930) - NO FLOW  | d. Place NaOH tank outlet valve switches to CLOSE. <ul style="list-style-type: none"><li>• AOV-836A</li><li>• AOV-836B</li></ul> |
| e. Stop CNMT spray pumps and place in AUTO   |  |
| f. Close CNMT spray pump discharge valves <ul style="list-style-type: none"><li>• MOV-860A</li><li>• MOV-860B</li><li>• MOV-860C</li><li>• MOV-860D</li></ul>    |  |

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"/>
	<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

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

\*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

1 **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

12

**Element :**

Observe note.

**OPTION #3** - Proceed to next step.

OPTION #4 - proceed to step 20.

**Conditions :**

CUE:

OPTION #3 = Transfer at maximum rate.

OPTION #4 = Transfer through SFP DI.

**Standards :**

Same as element.

**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

\*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** **Conditions :** **Standards :**  
 Close V-790. 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 1

**Comments :**

Satisfactory  Unsatisfactory

\*16 **Element :** **CRITICAL** **Conditions :** **Standards :**  
 Close V-796. 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 1

**Comments :**

Satisfactory  Unsatisfactory

\*17 **Element :** **CRITICAL** **Conditions :** **Standards :**  
 Open V-797. CUE: Valve no longer turns in that direction. 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** **Conditions :** **Standards :**  
 Close V-798A. 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

- \*19 **Element :** CRITICAL  
Close V-802.
- 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

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

**Comments :**

Satisfactory

Unsatisfactory

- \*21 **Element :** CRITICAL  
Slowly open V-803 and close V-804.
- Conditions :**  
CUE OPTION #4: Flow meter reads 60 gpm.  
CUE OPTION #3: Valves no longer turn in that direction.  
CUE BOTH OPTIONS: Secure transferring water to RWST.
- Standards :**  
Locates valves.  
Simulate unlocking and operating valves.  
IF performing OPTION #4, indicate that meter is monitored (for 60 gpm flow)=

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      **Conditions :**      **Standards :**  
Close V-803.      CUE: Valve no longer turns in that      Locate valve.  
direction.      Simulate closing valve and  
locking.  
  
CUE:(If student requests eSOMS  
location) eSOMS gives valve  
location at: AB INTER, SFP  
HEAT EXCH AREA, ELEV 4  
  
Cue: No further actions

**Comments :**

Satisfactory     

Unsatisfactory     

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JPM NO JC062.023

Dilute BAST following a Loss of All AC

Revision #: 2

Review Date: 9/14/2004

Location: Aux Bldg

Estimated Time (minutes): 18.00

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:**

The plant experienced a loss of all AC. BAST temperature is 153 degrees Fahrenheit.

**Initiating Cues :**

The plant experienced a loss of all AC. The BAST is at 153 degrees Fahrenheit. The Shift Supervisor directs you to dilute the BAST per ER-BA.1.

The Control Room has verified normal system alignment for steps 4.1.1 through 4.1.4, you are to begin actions at step 4.1.5. DO NOT MANIPULATE ANY EQUIPMENT.

**Description:** Dilute BAST Following LOSS OF ALL AC (JC062.023)

**JPM Tasks**

**Task ID:** 062-029-05-04B

**Task Standards**

In accordance with the procedure

**Tools :**

Safety Glasses

Hard Hat

Hearing Protection

**Terminating Cues**

Task Completion

Trainee Says Task is Completed

**References :**

<u>ID</u>	<u>Description</u>	<u>Review Date</u>	<u>Ref Flag</u>
PRER ER-BA.1	BAST TEMPERATURE CONCERNS - LOSS OF ALL AC		<input type="checkbox"/>

**Safety Considerations**

Radiological Hazard

**Consequences of Inadequate Performance:**

**General Comments :**

Radiation area entry required.  
Handout copy of ER-BA.1.

**Performance Checklist**

\*1 **Element :** CRITICAL  
Locate and open MOV-826A  
AND MOV-826C.

**Conditions :**  
CUE: (As each valve is  
manipulated) Valve no longer turns  
in that direction. (Cue for valve  
stem indication if examinee  
indicates observing for motion.)

**Standards :**  
Simulate depressing  
declutching device and  
opening valve with  
handwheel.

CUE: (If student requests eSOMS  
location) eSOMS gives valve  
location at: AB INTERMEDIATE  
EAST STAIRWAY AREA. ELEV  
(For V-826A): 4, (For V-826C): 6.

**Comments :**

**Satisfactory**

**Unsatisfactory**

\*2 **Element :** CRITICAL  
Locate and crack open  
MOV-826B OR MOV-826D.

**Conditions :**  
CUE: (If goes in open direction)  
Valve stem moves.

**Standards :**  
Simulate depressing  
declutching device and  
opening valve with  
handwheel.

CUE: (If student requests eSOMS  
location) eSOMS gives valve  
location at: AB INTERMEDIATE  
EAST STAIRWAY AREA, ELEV  
(For V-826B): 4, (For V-826D): 6

**Comments :**

**Satisfactory**

**Unsatisfactory**

3 **Element :**  
CUE for continuation

**Conditions :**  
CUE:  
If examinee monitors BAST  
overflow piping - Water flow is  
occurring.  
If examinee contacts Control  
Room - RWST level has decreased  
by 2%.

**Standards :**

**Comments :**

**Satisfactory**

**Unsatisfactory**

\*4 **Element :** CRITICAL  
Close MOV-826B or MOV-826D (whichever was previously opened).

**Conditions :**  
NOTE: Order of closure for 826 valves is not critical.  
  
CUE: Valve no longer turns in that direction.

**Standards :**  
Simulate using handwheel to close the valve that was opened.

**Comments :**

Satisfactory                          Unsatisfactory   

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\*5 **Element :** CRITICAL  
Close MOV-826A AND MOV-826C.

**Conditions :**  
CUE: (For each valve) Valve no longer turns in that direction.  
  
CUE: (If student requests eSOMS location) eSOMS gives valve location at: AB INTERMEDIATE EAST STAIRWAY AREA. ELEV (For v-826A): 4, (For V-826C): 6  
  
CUE: No further action.

**Standards :**  
Simulate using handwheels to close both valves.

**Comments :**

Satisfactory                          Unsatisfactory   

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

Reference Type	Reference ID	Description	Ref Flag
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