

Facility: Davis-Besse Task No.: 119-01303-0100

Task Title: Restore Cooling to the CRD's as Directed By DB-OP-06910, Trip Recovery JPM No.: 2005 NRC JPM A

K/A Reference: 001 A4.01 3.1 / 2.9

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X

Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: The plant is in the process of recovering from as SFAS Level 4 actuation. The operating crew has implemented DB-OP-06910, Trip Recovery.

Task Standard: One CRD Cooling Booster Pump running with a proper valve alignment.

Required Materials: DB-OP-06910, Section 6.1.4

General References: DB-OP-06910, Trip Recovery, Revision 09

Initiating Cue: The Control Room Supervisor has directed you to restore cooling to the CRD's in accordance with DB-OP-06910, Section 6.1.4. CRD Cooling Booster Pump 1 will be started and CRD Cooling Booster Pump 2 will be in standby.

Time Critical Task: NO

Validation Time: 5 minutes

SIMULATOR SETUP

- At power I/C.
- Initiate a spurious or actual event that will cause SFAS Level 4 valve alignment.
- Stabilize at a point where CRD Cooling can be restored.
- SNAP

(Denote Critical Steps with a check mark)

START TIME: _____

Performance Step: 1 Locate proper procedure/procedure section.
Standard: DB-OP-06910, 6.1.4.

Comment:

Evaluator's Cue: **Provide a copy of the procedure section.**

Performance Step: 2 Place HIS 1915, CRD CLNG BOOSTER PUMP 1, in LOCKOUT.
Standard: CRD CLNG BOOSTER PUMP 1, in LOCKOUT.

Comment:

Performance Step: 3 Place HIS 1924, CRD CLNG BOOSTER PUMP 2, in LOCKOUT.
Standard: CRD CLNG BOOSTER PUMP 2, in LOCKOUT.

Comment:

√ **Performance Step: 4** Open CC1328, using HIS 1328, CCW to CRD CLNG BOOSTER
PUMP 1 SUCT
Standard: CC1328 OPEN.

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 5** Open CC1338, using HIS 1338, CCW to CRD CLNG BOOSTER PUMP 2 SUCT.
- Standard:** CC1338 OPEN.
- Comment:**
-
- √ **Performance Step: 6** Open CC1567A, using HIS 1567A, CCW to CRDM.
- Standard:** CC1567A OPEN.
- Comment:**
-
- √ **Performance Step: 7** Open CC1567B, using HIS 1567B, CCW to CRDM.
- Standard:** CC1567B OPEN.
- Comment:**
-
- √ **Performance Step: 8** Start the preferred CRD Cooling Booster Pump by placing the control switch in AUTO:
- HIS 1915, CRD CLNG BOOSTER PUMP 1, in AUTO
 - OR
 - HIS 1924, CRD CLNG BOOSTER PUMP 2, in AUTO
- Standard:** Places CRD CLNG BOOSTER PUMP 1 in AUTO and verifies START.
- Comment:**

PERFORMANCE INFORMATION

Performance Step: 9 Place the standby CRD Cooling Booster Pump control switch in AUTO:

- HIS 1915, CRD CLNG BOOSTER PUMP 1, in AUTO
- OR
- HIS 1924, CRD CLNG BOOSTER PUMP 2, in AUTO

Standard: Places CRD CLNG BOOSTER PUMP 2 in AUTO.

Comment:

Terminating Cue: When the Candidate places the standby pump in AUTO, this JPM is complete.

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM A

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: The plant is in the process of recovering from as SFAS Level 4 actuation. The operating crew has implemented DB-OP-06910, Trip Recovery.

INITIATING CUE: The Control Room Supervisor has directed you to restore cooling to the CRD's in accordance with DB-OP-06910, Section 6.1.4. CRD Cooling Booster Pump 1 will be started and CRD Cooling Booster Pump 2 will be in standby.

Facility: Davis-Besse Task No.: 119-01303-0100

Task Title: Restore Cooling to the CRD's as Directed By DB-OP-06910, Trip Recovery JPM No.: 2005 NRC JPM A

K/A Reference: 001 A4.01 3.1 / 2.9

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: The plant is in the process of recovering from an inadvertent SFAS Level 4 actuation. The operating crew has implemented DB-OP-06910, Trip Recovery.

Task Standard: One CRD Cooling Booster Pump running with a proper valve alignment.

Required Materials: DB-OP-06910, Section 6.1.4

General References: DB-OP-06910, Trip Recovery, Revision 09

Initiating Cue: The Control Room Supervisor has directed you to restore cooling to the CRD's in accordance with DB-OP-06910, Section 6.1.4. CRD Cooling Booster Pump 1 will be started and CRD Cooling Booster Pump 2 will be in standby.

Time Critical Task: NO

Validation Time: 5 minutes

SIMULATOR SETUP

- At power I/C.
- Initiate a spurious or actual event that will cause SFAS Level 4 valve alignment.
- Stabilize at a point where CRD Cooling can be restored.
- SNAP

PERFORMANCE INFORMATION

(Denote Critical Steps with a check mark)

START TIME: _____

Performance Step: 1 Place HIS 1915, CRD CLNG BOOSTER PUMP 1, in LOCKOUT.

Standard: Places CRD CLNG BOOSTER PUMP 1, in LOCKOUT.
Observes green and amber lights illuminate

Comment:

Performance Step: 2 Place HIS 1924, CRD CLNG BOOSTER PUMP 2, in LOCKOUT.

Standard: Places CRD CLNG BOOSTER PUMP 2, in LOCKOUT.
Observes green and amber lights illuminate

Comment:

√ **Performance Step: 3** Open CC1328, using HIS 1328, CCW to CRD CLNG BOOSTER PUMP 1 SUCT

Standard: Presses CC1328 OPEN. Observes green light extinguish,
followed by red light illuminating

Comment:

√ **Performance Step: 4** Open CC1338, using HIS 1338, CCW to CRD CLNG BOOSTER PUMP 2 SUCT.

Standard: Presses CC1338 OPEN. Observes green light extinguish,
followed by red light illuminating

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 5** Open CC1567A, using HIS 1567A, CCW to CRDM.
- Standard:** Presses CC1567A OPEN. Observes green light extinguish, followed by red light illuminating
- Comment:**
-
- √ **Performance Step: 6** Open CC1567B, using HIS 1567B, CCW to CRDM.
- Standard:** Presses CC1567B OPEN. Observes green light extinguish, followed by red light illuminating
- Comment:**
-
- √ **Performance Step: 7** Start the preferred CRD Cooling Booster Pump by placing the control switch in AUTO:
- HIS 1915, CRD CLNG BOOSTER PUMP 1, in AUTO
 - OR
 - HIS 1924, CRD CLNG BOOSTER PUMP 2, in AUTO
- Standard:** Places CRD CLNG BOOSTER PUMP 1 in AUTO and verifies START. Observes Red light illuminate. Green and Amber lights extinguish
- Comment:**

PERFORMANCE INFORMATION

Performance Step: 8 Place the standby CRD Cooling Booster Pump control switch in AUTO:

- HIS 1915, CRD CLNG BOOSTER PUMP 1, in AUTO

OR

- HIS 1924, CRD CLNG BOOSTER PUMP 2, in AUTO

Standard: Places CRD CLNG BOOSTER PUMP 2 in AUTO. Observes amber light extinguish

Comment:

Terminating Cue: When the Candidate places the standby pump in AUTO, this JPM is complete.

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM A

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: The plant is in the process of recovering from an inadvertent SFAS Level 4 actuation. The operating crew has implemented DB-OP-06910, Trip Recovery.

INITIATING CUE: The Control Room Supervisor has directed you to restore cooling to the CRD's in accordance with DB-OP-06910, Section 6.1.4. CRD Cooling Booster Pump 1 will be started and CRD Cooling Booster Pump 2 will be in standby.

Facility: Davis-Besse Task No.: 004-044-04-0100

Task Title: Respond To A Loss of Normal RCS Makeup JPM No.: 2005 NRC JPM B

K/A Reference: 004 A2.07 3.4 / 3.7 Facility Bank JPM 082

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: The plant is operating at 100% power.

Task Standard: Alternate injection line in service and letdown flow restored.

Required Materials: Copy of DB-OP-02512.

General References: DB-OP-02512, Loss of RCS Makeup, Revision 07

Initiating Cue: Respond to indications and/or alarms.

Time Critical Task: NO

Validation Time: 5 minutes

SIMULATOR SETUP**TASK DESCRIPTION:**

Loss of Normal RCS Makeup Flowpath

INITIAL CONDITIONS:

Mode 1

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

None.

MALFUNCTIONS/FAILURE TO INSERT:

Fail MU32 closed (IMF BV14B) after Candidate has assumed the watch.

ACTION/CUES:

- | | | |
|-----|---------|--|
| 7. | ACTION: | Determine status of MU 32. |
| | CUE: | MU 32, Pressurizer Level Control valve, appears to be failed closed. |
| 13. | ACTION: | Open MU6423B. (IRF BM3B 1.0) |
| | CUE: | MU6423B is open. |

(Denote Critical Steps with a check mark)

START TIME: _____

NOTE: Critical steps denoted with a \checkmark . Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT assumed unless denoted in the "Comments".

Performance Step: 1 Locate the correct procedure.
Standard: Identifies DB-OP-02512, Section 4.2, Loss of RCS Makeup Flowpath.

Comment: Hand procedure copy to examinee.

Performance Step: 2 IF PZR level is less than the minimum required level in accordance with curve CC 4.3, Minimum Pressurizer Level vs. RC Temperature, of DB-PF-06703, Miscellaneous Operations Curves, THEN perform the following:

Standard: Verifies PZR level > 160 inches.

Comment:

Performance Step: 3 Isolate letdown.
Standard: Push CLOSE pushbutton on HIS MU2B, LETDOWN ISO., or HIS MU3, LETDOWN COOLERS OUTLET.

Comment:

PERFORMANCE INFORMATION

Performance Step: 4 IF Seal Injection is lost, THEN close MU 19.

Standard: Verifies seal injection flow.

Comment:

Performance Step: 5 Determine the cause of the loss of flowpath.

Standard: Identifies MU32, Pressure Level Control valve, as being (failed) closed.

Comment:

Performance Step: 6 IF a loss of flowpath is due to a leak, THEN REFER TO DB-OP-02522, Small RCS Leaks.

Standard: Identifies no leak exists.

Comment:

Evaluator's Cue: **The Unit Supervisor has determined no leak exists.**

Performance Step: 7 Close MU 32, PRESSURIZER LEVEL CONTROL.

Standard: Places LIC RC14, PRESSURIZER LEVEL CONTROL, in "MANUAL" and lowers demand to zero.

Comment: **The examinee may send an EO to check the valve locally.**

Performance Step: 8 IF use of the Standby Makeup Pump will restore Makeup, THEN perform the following:

Standard: Identifies that the second makeup pump will not restore makeup.

Comment:

PERFORMANCE INFORMATION

Performance Step: 9 IF use of the alternate injection line will restore Makeup, THEN place the alternate injection line in service as follows:

Standard: Determines that use of the alternate injection line will restore makeup.

Comment:

Performance Step: 10 Close MU 6422, MU PUMP 2 TO RCS.

Standard: Pushes CLOSE pushbutton on HIS 6422, MU PUMP 2 TO RCS, and verifies position.

Comment:

√ **Performance Step: 11** Open MU 6421, MU PUMP 1 TO RCS.

Standard: Pushes OPEN pushbutton on HIS 6421, MU PUMP 1 TO RCS, and verifies position

Comment:

√ **Performance Step: 12** Throttle MU 6419, ALTERNATE MU LINE THROTTLE VALVE, to control pressurizer level.

Standard: Pushes OPEN pushbutton on HIS 6419 to establish Makeup flow as required to maintain Pressurizer Level.

Comment: **If Pressurizer level is > 220" MU6419 may not be opened.**

PERFORMANCE INFORMATION

Performance Step: 13 Open MU 6423B, Mini-flow bypass around MU 6419.
Standard: Verbal communication with an Equipment Operator to open MU6423B.

Comment:

Performance Step: 14 Notify Duty Transient Assessment Manager that the alternate injection line has been placed in service.
Standard: Identify this communication is needed.

Comment:

Evaluator's Cue: **The Shift Manager will perform this notification.**

Performance Step: 15 IF Makeup cannot be restored, THEN GO TO Step 4.1.10.a.
Standard: Identifies makeup is restored.

Comment:

√ **Performance Step: 16** Restore letdown.
Standard: Push OPEN pushbutton on HIS MU2B, LETDOWN ISO., or HIS MU3, LETDOWN COOLERS OUTLET.

Comment:

Terminating Cue: **This JPM is complete.**

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM B

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: The plant is operating at 100% power.

INITIATING CUE: Respond to indications and/or alarms.

Facility: Davis-Besse Task No.: 004-044-04-0100

Task Title: Respond To A Loss of Normal RCS Makeup JPM No.: 2005 NRC JPM B

K/A Reference: 004 A2.07 3.4 / 3.7 Facility Bank JPM 082

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: The plant is operating at 100% power. You are the Primary RO. Annunciator 4-2-E, PZR LEVEL LO, has illuminated.

Task Standard: Alternate injection line in service and letdown flow restored.

Required Materials: Copy of DB-OP-02512.

General References: DB-OP-02512, Loss of RCS Makeup, Revision 07

Initiating Cue: You have been directed to respond to annunciator 4-2-E

Time Critical Task: NO

Validation Time: 5 minutes

SIMULATOR SETUP**TASK DESCRIPTION:**

Loss of Normal RCS Makeup Flowpath

INITIAL CONDITIONS:

Mode 1

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

None.

MALFUNCTIONS/FAILURE TO INSERT:

Fail MU32 closed (IMF BV14B) after Candidate has assumed the watch.

ACTION/CUES:

- | | | |
|-----|---------|--|
| 7. | ACTION: | Determine status of MU 32. |
| | CUE: | MU 32, Pressurizer Level Control valve, appears to be failed closed. |
| 13. | ACTION: | Open MU6423B. (IRF BM3B 1.0) |
| | CUE: | MU6423B is open. |

PERFORMANCE INFORMATION

(Denote Critical Steps with a check mark)

START TIME: _____

NOTE: Critical steps denoted with a \checkmark . Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT assumed unless denoted in the "Comments".

Performance Step: 1 Refer to Annunciator Response

Standard: Checks parameters as directed in ARP. Identifies DB-OP-02512, Section 4.2, Loss of RCS Makeup Flowpath as the correct procedure.

NOTE: **Candidate may diagnose as event that requires use of DB-OP-02513, but should route to DB-OP-02512 when recognizing that it does not apply**

Comment:

Performance Step: 2 Locate the correct procedure.

Standard: Identifies DB-OP-02512, Section 4.2, Loss of RCS Makeup Flowpath.

Comment: **Hand procedure copy to examinee.**

Performance Step: 3 IF PZR level is less than the minimum required level in accordance with curve CC 4.3, Minimum Pressurizer Level vs. RC Temperature, of DB-PF-06703, Miscellaneous Operations Curves, THEN perform the following:

Standard: Verifies PZR level > 160 inches.

Comment:

PERFORMANCE INFORMATION

Performance Step: 4	Isolate letdown.
Standard:	Push CLOSE pushbutton on HIS MU2B, LETDOWN ISO., or HIS MU3, LETDOWN COOLERS OUTLET. Observes red light OFF, green light ON, and flow lowering to ZERO
Comment:	
Performance Step: 5	<u>IF</u> Seal Injection is lost, <u>THEN</u> close MU 19.
Standard:	Verifies seal injection flow.
Comment:	
Performance Step: 6	Determine the cause of the loss of flowpath.
Standard:	Identifies MU32, Pressure Level Control valve, as being (failed) closed. (OPEN demand with NO flow)
Comment:	
Performance Step: 7	<u>IF</u> a loss of flowpath is due to a leak, <u>THEN REFER TO</u> DB-OP-02522, Small RCS Leaks.
Standard:	Identifies no leak exists due to pressurizer level stabilizing.
Comment:	
Evaluator's Cue:	The Unit Supervisor has determined no leak exists.

PERFORMANCE INFORMATION

Performance Step: 8 Close MU 32, PRESSURIZER LEVEL CONTROL.
Standard: Places LIC RC14, PRESSURIZER LEVEL CONTROL, in "MANUAL" and lowers demand to zero.
Comment: The examinee may send an EO to check the valve locally.

Performance Step: 9 IF use of the Standby Makeup Pump will restore Makeup, THEN perform the following:
Standard: Identifies that the second makeup pump will not restore makeup.
Comment:

Performance Step: 10 IF use of the alternate injection line will restore Makeup, THEN place the alternate injection line in service as follows:
Standard: Determines that use of the alternate injection line will restore makeup.
Comment:

Performance Step: 11 Close MU 6422, MU PUMP 2 TO RCS.
Standard: Pushes CLOSE pushbutton on HIS 6422, MU PUMP 2 TO RCS, and verifies position. Observes green light ON, red light OFF
Comment:

√ **Performance Step: 12** Open MU 6421, MU PUMP 1 TO RCS.
Standard: Pushes OPEN pushbutton on HIS 6421, MU PUMP 1 TO RCS, and verifies position. Observes green light ON, red light OFF
Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 13** Throttle MU 6419, ALTERNATE MU LINE THROTTLE VALVE, to control pressurizer level.
- Standard:** Pushes OPEN pushbutton on HIS 6419 to establish Makeup flow as required to maintain Pressurizer Level. Observes red and green lights ON
- Comment:** **If Pressurizer level is > 220" MU6419 may not be opened.**
- Performance Step: 14** Open MU 6423B, Mini-flow bypass around MU 6419.
- Standard:** Verbal communication with an Equipment Operator to open MU6423B.
- Comment:**
- Performance Step: 15** Notify Duty Transient Assessment Manager that the alternate injection line has been placed in service.
- Standard:** Identify this communication is needed.
- Comment:**
- Evaluator's Cue:** **The Shift Manager will perform this notification.**
- Performance Step: 16** IF Makeup cannot be restored, THEN GO TO Step 4.1.10.a.
- Standard:** Identifies makeup is restored.
- Comment:**
- √ **Performance Step: 17** Restore letdown.
- Standard:** Push OPEN pushbutton on HIS MU2B, LETDOWN ISO., or HIS MU3, LETDOWN COOLERS OUTLET. Observes red light ON, green light OFF, and Letdown flow RISING

Comment:

Terminating Cue: **This JPM is complete.**

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM B

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: The plant is operating at 100% power. You are the Primary RO.
Annunciator 4-2-E, PZR LEVEL LO, has illuminated.

INITIATING CUE: You have been directed to respond to annunciator 4-2-E

Facility: Davis-Besse Task No.: 006-026-05-0100

Task Title: Emergency Close a Core Flood
Tank Isolation Valve JPM No.: 2005 NRC JPM C

K/A Reference: 006 A4.02 4.0 / 3.8 Facility Bank JPM 089

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant is in Mode 3.
- Due to check valve leakage, Core Flood Tank 2 level has been rising.

Task Standard: CF1A, Core Flood Tank 2 Isolation Valve, CLOSED and SFAS Channel 2 Test Trip Bypass Switch in OPERATE.

Required Materials: Copy of DB-OP-06014, Sections 2.0 and 5.2.

General References: DB-OP-06014, Revision 10

Initiating Cue: The Unit Supervisor directs you to perform Section 5.2 of DB-OP-06014, Core Flood System Procedure, Emergency Closure of Core Flood Tank 2 Isolation Valve CF1A.

Time Critical Task: NO

Validation Time: 11 minutes

SIMULATOR SETUP**TASK DESCRIPTION:**

Emergency Closure of Core Flood Tank 2 Isolation Valve CF1A.

INITIAL CONDITION:

MODE.

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

Fill Core Flood Tank 2 to a level of approximately 13.8 feet.
Set current adjust potentiometer fully clockwise in SFAS Ch. 2.

MALFUNCTIONS/FAILURE TO INSERT:

None.

ACTION/CUES:

1. ACTION: Close Breaker BF 1120 on Bus F11A (CF1A). IRF BF1AC TRUE
 CUE: Breaker BF 1120 closed.
2. ACTION: Open Breaker BF 1120 on Bus F11A (CF1A). IRF BF1AC FALSE
 CUE: Breaker BF 1120 is locked open.

(Denote Critical Steps with a check mark)

START TIME: _____

NOTE: Critical steps denoted with a √. Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT assumed unless denoted in the "Comments".

Performance Step: 1 Locate the correct procedure.

Standard: Locates DB-OP-06014, Core Flooding System Procedure, Section 5.2.

Comment:

Evaluator's Cue: Provide a copy of Sections 2.0 and 5.2.

Performance Step: 2 Notify the Shift Manager that changing the position of the Test Trip Bypass Switch (TTBS) may result in temporarily increased RPS Source Range NI-1.

Standard: Informs Shift Manager that changing the position of the Test Trip Bypass Switch (TTBS) may result in temporarily increased RPS Source Range NI-1.

Comment:

Evaluator's Cue: Acknowledge/repeat back.

Performance Step: 3 Obtain the following keys:

- SFAS CH2 Cabinet Door key.
- SFAS TEST TRIP BYPASS key.

Standard: Obtains keys.

Comment:

PERFORMANCE INFORMATION

Performance Step: 4

Signs and dates:

Prerequisites completed by: _____

Standard:

Signs and dates.

Comment:√ **Performance Step: 5**

Turn TEST TRIP BYPASS (TTB) switch to REACTOR COOLANT (RC) PRESSURE.

Standard:

TTB switch selected to the RC PRESSURE position.

Comment:√ **Performance Step: 6**

Turn and hold the RC (OPER – TEST) Switch to TEST.

Standard:

Turns and holds the RC (OPER-TEST) switch in the TEST position.

Comment:**Examinee may use mechanical aid to hold switch in position.**√ **Performance Step: 7**

Unlock and close BF1120, MCVF01A CF TK 2 ISOL VLV, on MCC F11A.

Standard:

Contacts an EO to unlock and close Breaker BF1120 on F11A.

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 8** Close CF1A, CFT 2 DISCHARGE ISOLATION, using HIS CF1A, AND record the time.
- Standard:** Press CLOSE on HIS CF1A, verifies position and records time closed.
- Comment:** **It is NOT critical to record the time.**
-
- √ **Performance Step: 9** Open and lock Breaker BF1120 on F11A.
- Standard:** Verbal communication with an Equipment Operator to open and lock Breaker BF 1120 on F11A.
- Comment:**
- Evaluator's Cue:** **When that step is complete: Unit Supervisor directs the SFAS channel to be returned to normal.**
-
- √ **Performance Step: 10** Release the RC (OPER-TEST) switch to the OPER position.
- Standard:** RC (OPER-TEST) switch released and verified in the OPER position.
- Comment:**

PERFORMANCE INFORMATION

√ **Performance Step: 11** Reset the following tripped bistables by depressing the RESET button on each bistable as required:

- RC PRESSURE LO TRIP (BA 204)
- RC PRESSURE LO LO TRIP (BA 206)
- RC PRESSURE CHANNEL FAILURE (BA 207).

Standard: RESETS and verifies TRIP light OFF:

- RC PRESSURE LO TRIP (BA 204), [CRITICAL]
- RC PRESSURE LO LO TRIP (BA 206), [CRITICAL]
- RC PRESSURE CHANNEL FAILURE (BA 207), [NOT CRITICAL]

Comment: Reset of BA 204, BA 206 critical; BA 207 not critical.

Performance Step: 12 Verify the following bistables reset:

- RCS PRESSURE LO BLOCK (BA 203)
- RCS PRESSURE LO LO BLOCK (BA 205).

Standard: Verifies Red TRIP light OFF for:

- RCS PRESSURE LO BLOCK (BA 203)
- RCS pressure LO LO BLOCK (BA 205)

Comment:

√ **Performance Step: 13** Turn the TEST TRIP BYPASS switch to OPERATE.

Standard: TEST TRIP BYPASS switch selected to OPERATE.

Comment:

Terminating Cue: This JPM is complete.

PERFORMANCE INFORMATION

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM C

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant is in Mode 3.
- Due to check valve leakage, Core Flood Tank 2 level has been rising.

INITIATING CUE:

The Unit Supervisor directs you to perform Section 5.2 of DB-OP-06014, Core Flood System Procedure, Emergency Closure of Core Flood Tank 2 Isolation Valve CF1A.

Facility: Davis-Besse Task No.: 006-026-05-0100

Task Title: Emergency Close a Core Flood
Tank Isolation Valve JPM No.: 2005 NRC JPM C

K/A Reference: 006 A4.02 4.0 / 3.8 Facility Bank JPM 089

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant is in Mode 3.
- Due to check valve leakage, Core Flood Tank 2 level has been rising.

Task Standard: CF1A, Core Flood Tank 2 Isolation Valve, CLOSED and SFAS Channel 2 Test Trip Bypass Switch in OPERATE.

Required Materials: Copy of DB-OP-06014, Sections 2.0 and 5.2.

General References: DB-OP-06014, Revision 10

Initiating Cue: The Unit Supervisor directs you to perform Section 5.2 of DB-OP-06014, Core Flood System Procedure, Emergency Closure of Core Flood Tank 2 Isolation Valve CF1A.

Time Critical Task: NO

Validation Time: 11 minutes

SIMULATOR SETUP**TASK DESCRIPTION:**

Emergency Closure of Core Flood Tank 2 Isolation Valve CF1A.

INITIAL CONDITION:

MODE.

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

Fill Core Flood Tank 2 to a level of approximately 13.8 feet.
Set current adjust potentiometer fully clockwise in SFAS Ch. 2.

MALFUNCTIONS/FAILURE TO INSERT:

None.

ACTION/CUES:

1. ACTION: Close Breaker BF 1120 on Bus F11A (CF1A). IRF BF1AC TRUE
 CUE: Breaker BF 1120 closed.
2. ACTION: Open Breaker BF 1120 on Bus F11A (CF1A). IRF BF1AC FALSE
 CUE: Breaker BF 1120 is locked open.

(Denote Critical Steps with a check mark)

START TIME: _____

NOTE: Critical steps denoted with a √. Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT assumed unless denoted in the "Comments".

Performance Step: 1 Locate the correct procedure.

Standard: Locates DB-OP-06014, Core Flooding System Procedure, Section 5.2.

Comment:

Evaluator's Cue: Provide a copy of Sections 2.0 and 5.2.

Performance Step: 2 Notify the Shift Manager that changing the position of the Test Trip Bypass Switch (TTBS) may result in temporarily increased RPS Source Range NI-1.

Standard: Informs Shift Manager that changing the position of the Test Trip Bypass Switch (TTBS) may result in temporarily increased RPS Source Range NI-1.

Comment:

Evaluator's Cue: Acknowledge/repeat back.

√ **Performance Step: 3** Obtain the following keys:

- SFAS CH2 Cabinet Door key.
- SFAS TEST TRIP BYPASS key.

Standard: Obtains keys.

Comment:

PERFORMANCE INFORMATION

Performance Step: 4 Signs and dates:
Prerequisites completed by: _____

Standard: Signs and dates.

Comment:

√ **Performance Step: 5** Turn TEST TRIP BYPASS (TTB) switch to REACTOR COOLANT (RC) PRESSURE.
Standard: TTB switch selected to the RC PRESSURE position. Observes red light ON

Comment:

√ **Performance Step: 6** Turn and hold the RC (OPER – TEST) Switch to TEST.
Standard: Turns and holds the RC (OPER-TEST) switch in the TEST position.

Comment: **Examinee may use mechanical aid to hold switch in position.**

√ **Performance Step: 7** Unlock and close BF1120, MCVF01A CF TK 2 ISOL VLV, on MCC F11A.
Standard: Contacts an EO to unlock and close Breaker BF1120 on F11A. Observes blue light OFF

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 8** Close CF1A, CFT 2 DISCHARGE ISOLATION, using HIS CF1A, AND record the time.
- Standard:** Press CLOSE on HIS CF1A, verifies position by observing green light ON, red light OFF, and records time closed.
- Comment:** **It is NOT critical to record the time.**

- √ **Performance Step: 9** Open and lock Breaker BF1120 on F11A.
- Standard:** Verbal communication with an Equipment Operator to open and lock Breaker BF 1120 on F11A.
- Comment:**
- Evaluator's Cue:** **When that step is complete: Unit Supervisor directs the SFAS channel to be returned to normal.**

- Performance Step: 10** Release the RC (OPER-TEST) switch to the OPER position.
- Standard:** RC (OPER-TEST) switch released and verified in the OPER position.
- Comment:**

PERFORMANCE INFORMATION

Performance Step: 11 Reset the following tripped bistables by depressing the RESET button on each bistable as required:

- RC PRESSURE LO TRIP (BA 204)
- RC PRESSURE LO LO TRIP (BA 206)
- RC PRESSURE CHANNEL FAILURE (BA 207).

Standard: RESETS and verifies TRIP light OFF:

- RC PRESSURE LO TRIP (BA 204), [CRITICAL]
- RC PRESSURE LO LO TRIP (BA 206), [CRITICAL]
- RC PRESSURE CHANNEL FAILURE (BA 207), [NOT CRITICAL]

Comment: Reset of BA 204, BA 206 critical; BA 207 not critical.

Performance Step: 12 Verify the following bistables reset:

- RCS PRESSURE LO BLOCK (BA 203)
- RCS PRESSURE LO LO BLOCK (BA 205).

Standard: Verifies Red TRIP light OFF for:

- RCS PRESSURE LO BLOCK (BA 203)
- RCS pressure LO LO BLOCK (BA 205)

Comment:

Performance Step: 13 Turn the TEST TRIP BYPASS switch to OPERATE.

Standard: TEST TRIP BYPASS switch selected to OPERATE.

Comment:

Terminating Cue: This JPM is complete.

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM C

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant is in Mode 3.
- Due to check valve leakage, Core Flood Tank 2 level has been rising.

INITIATING CUE:

The Unit Supervisor directs you to perform Section 5.2 of DB-OP-06014, Core Flood System Procedure, Emergency Closure of Core Flood Tank 2 Isolation Valve CF1A.

Facility: Davis-Besse Task No.: 005-019-01-0100

Task Title: Swap Running DHR Loops JPM No.: 2005 NRC JPM D

K/A Reference: 005 A4.01 3.6 / 3.4

Examinee:

NRC Examiner:

Facility Evaluator:

Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant is in Mode 5, 70 psig and 145°F.
- Pressurizer level is 80 inches.
- Decay Heat Loop 1 is operating and aligned for purification using the Makeup and Purification System.

Task Standard: DH Pump 2 running, DH Pump 1 and stopped, and all flow through DH Loop 2.

Required Materials:

- Copy of DB-OP-06012, Section 2.0 with non-applicable limits and PRECAUTIONS crossed out.
- Copy of DB-OP-06012, Section 3.11

General References: DB-OP-06012, Revision 23

Initiating Cue: The Unit Supervisor directs you to swap from DH Loop 1 to DH Loop 2 for RCS Cooling per DB-OP-06012, DH/LPI Operating Procedure.

Time Critical Task: NO

Validation Time: 10 minutes

SIMULATOR SETUP**TASK DESCRIPTION:**

Swap Decay Heat Pumps During Decay Heat Removal.

INITIAL CONDITION:

Mode 5, DH Train 1 In Service
RCS at 70 psig and 145°F.

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

RCS aligned for purification via DH Train 1 using M/U and Purification System (DH 33 and DH 61 open).

CCW non-essential loads are on Loop 1.

Open in CAEP LUDH1PURF in OPS directory.

MALFUNCTIONS/FAILURE TO INSERT:

None.

ACTION/CUES:

1. ACTION: CLOSE DH 61 and DH 33.
 OPEN DH 32.
 CUE: DH 61 and DH 33 are CLOSED
 DH 32 is OPEN.
2. ACTION: EO standing by at DH Pump 2.
 CUE: I am standing by at DH Pump 2.

.

(Denote Critical Steps with a check mark)

START TIME: _____

NOTE: Critical steps denoted with a \checkmark . Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT assumed unless denoted in the "Comments".

Performance Step: 1 Locate the correct procedure section.
Standard: Identifies Section 3.11, as the correct procedure section.

Comment: Provide trainee with a copy of procedure Section 2.0 and 3.11 with all Prerequisites signed off.

Performance Step: 2 IF the DH Loop 1 is aligned for purification using the MU and Purification System, THEN perform the following:

- Close DH 61, DH PUMP 1 DISCHARGE TO MU & PURIF AND SFP DEMIN ISO.
- Close DH 33, DH PUMP 1 DH PUMP 1 SUCTION FROM MU & PURIF DEMIN.
- IF DH Loop 2 will be aligned for purification using the MU and Purification System, THEN open DH 32, DH PUMP 2 SUCTION FROM MU&P DEMIN.

Standard: Dispatch an Equipment Operator to:

- CLOSE DH 61, DH Pump 1-1 Disch. to SFP & MU&P.
- CLOSE DH 33, DH Pump 1-1 suction from MU&P Demin.
- OPEN DH 32, DH Pump 1-2 suction from MU&P Demin.

Comment:

Evaluator's Cue: (If asked) DHR Train 1 is on purification using the MU and Purification System.

PERFORMANCE INFORMATION

Performance Step: 3 Verify DH 1A, DH PUMP 2 DISCHARGE TO RCS, is open.
Standard: Verifies DH1A OPEN.

Comment:

Evaluator's Cue: **(After this step is completed) The CCW Non-Essential Header is being supplied from CCW Loop 1.**

Performance Step: 4 Verify open CC 1469, CC OUTLET FROM DH COOLER 2, using HIS 1469.

Standard: Presses OPEN on HIS 1469 and/or verifies valve OPEN.

Comment:

Performance Step: 5 Station an Equipment Operator at DH Pump 2.

Standard: Dispatches an Equipment Operator to DH Pump 2.

Comment:

√ **Performance Step: 6** START DH Pump 2 using HIS DH6A.

Standard: DH Pump 2 running.

Comment:

PERFORMANCE INFORMATION

- ✓ **Performance Step: 7** Position the following valves as necessary to slowly raise DH Loop 2 flow as observed on FYI DH2A:
- DH 14A, DH COOLER 2 OUTLET FLOW CONTROL VALVE, using HIC DH 14A.
 - DH 13A, DH COOLER 2 BYPASS FLOW CONTROL VALVE, using HIC DH 13A.
- Standard:** Using HIC DH 14A and HIC DH 13A to control DH 14A and DH 13A slowly raises DH Loop 2 flow while maintaining total flow ≤ 2800 gpm.
- Comment:** **Performance Steps 7 and 8 are performed concurrently until all flow is through Loop 2.**
- ✓ **Performance Step: 8** Position the following valves as necessary to reduce DH Loop 1 flow as observed on FYI DH2B, until all DH System flow is through DH Loop 2:
- Standard:** Using HIC DH 14B and HIC DH 13B to control DH 14B and DH 13B, slowly reduces flow until all flow is through DH Loop 2.
- Comment:** **Performance Steps 7 and 8 are performed concurrently until all flow is through Loop 2.**
- Performance Step: 9** Stop DH Pump 1 using HIS DH6B.
- Standard:** DH Pump 1 stopped.
- Comment:**
- Evaluator's Cue:**
- Performance Step: 10** Close CC 1467, CC OUTLET FROM DH COOLER 1, using HIS 1467.
- Standard:** CC 1467 closed.
- Comment:**

Terminating Cue: **This JPM is complete.**

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM D

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant is in Mode 5, 70 psig and 145°F.
- Pressurizer level is 80 inches.
- Decay Heat Loop 1 is operating and aligned for purification using the Makeup and Purification System.

INITIATING CUE:

The Unit Supervisor directs you to swap from DH Loop 1 to DH Loop 2 for RCS Cooling per DB-OP-06012, DH/LPI Operating Procedure.

Facility: Davis-Besse Task No.: 005-019-01-0100

Task Title: Swap Running DHR Loops JPM No.: 2005 NRC JPM D

K/A Reference: 005 A4.01 3.6 / 3.4

Examinee:

NRC Examiner:

Facility Evaluator:

Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant is in Mode 5, 70 psig and 125°F.
- Pressurizer level is 80 inches.
- Decay Heat Loop 1 is operating.

Task Standard: DH Pump 2 running, DH Pump 1 and stopped, and all flow through DH Loop 2.

Required Materials:

- Copy of DB-OP-06012, Section 2.0 with non-applicable limits and PRECAUTIONS crossed out.
- Copy of DB-OP-06012, Section 3.11

General References: DB-OP-06012, Revision 23

Initiating Cue: The Unit Supervisor directs you to swap from DH Loop 1 to DH Loop 2 for RCS Cooling per DB-OP-06012, DH/LPI Operating Procedure. Steps 3.11.1 – 3.11.7 are complete.

Time Critical Task: NO

Validation Time: 30 minutes

SIMULATOR SETUP**TASK DESCRIPTION:**

Swap Decay Heat Pumps During Decay Heat Removal.

INITIAL CONDITION:

Mode 5, DH Train 1 In Service
RCS at 70 psig and 125°F.

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

RCS aligned for purification via DH Train 1 using M/U and Purification System (DH 33 and DH 61 open).

CCW non-essential loads are on Loop 1.

Open in CAEP LUDH1PURF in OPS directory.

MALFUNCTIONS/FAILURE TO INSERT:

None.

ACTION/CUES:

1. ACTION: CLOSE DH 61 and DH 33.
 OPEN DH 32.
 CUE: DH 61 and DH 33 are CLOSED
 DH 32 is OPEN.
2. ACTION: EO standing by at DH Pump 2.
 CUE: I am standing by at DH Pump 2.

.

(Denote Critical Steps with a check mark)

START TIME: _____

NOTE: Critical steps denoted with a √. Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT assumed unless denoted in the "Comments".

NOTE: Provide trainee with a copy of procedure Section 2.0 and 3.11 with all Prerequisites signed off, and steps signed off through 3.11.7.

Performance Step: 1 Verify DH 1A, DH PUMP 2 DISCHARGE TO RCS, is open.

Standard: Verifies DH1A OPEN by observing Red light ON.

Comment:

Performance Step: 2 Verify Non-Essential Header is being supplied from Loop 1

Standard: Verifies CC-2645, CC-4095, and CC-5097 are open by observing red lights ON

Comment:

√ **Performance Step: 3** Verify open CC 1469, CC OUTLET FROM DH COOLER 2, using HIS 1469.

Standard: Presses OPEN on HIS 1469 and observes red light ON, green light OFF.

Comment:

PERFORMANCE INFORMATION

Performance Step: 4 Station an Equipment Operator at DH Pump 2.

Standard: Dispatches an Equipment Operator to DH Pump 2.

Comment:

Evaluator Cue: **An EO is stationed at the pump**

Note: May announce starting DH Pump 2 prior to the action

√ **Performance Step: 5** START DH Pump 2 using HIS DH6A.

Standard: Places DH Pump 2 control switch to START. Observes green light OFF, red light ON, amps rising

Comment:

√ **Performance Step: 6** Position the following valves as necessary to slowly raise DH Loop 2 flow as observed on FYI DH2A:

- DH 14A, DH COOLER 2 OUTLET FLOW CONTROL VALVE, using HIC DH 14A.
- DH 13A, DH COOLER 2 BYPASS FLOW CONTROL VALVE, using HIC DH 13A.

Standard: Using HIC DH 14A and HIC DH 13A to control DH 14A and DH 13A slowly raises DH Loop 2 flow while maintaining total flow ≥ 2800 gpm. (AND less than 4300 gpm per pump)

Comment: **Performance Steps 7 and 8 are performed concurrently until all flow is through Loop 2.**

PERFORMANCE INFORMATION

- ✓ **Performance Step: 7** Position the following valves as necessary to reduce DH Loop 1 flow as observed on FYI DH2B, until all DH System flow is through DH Loop 2:
- Standard:** Using HIC DH 14B and HIC DH 13B to control DH 14B and DH 13B, slowly reduces flow until all flow is through DH Loop 2.
- Comment:** **Performance Steps 7 and 8 are performed concurrently until all flow is through Loop 2.**

- Performance Step: 8** Stop DH Pump 1 using HIS DH6B.
- Standard:** Places DH Pump 1 control switch in STOP. Observes green light ON, red light OFF, and amps lower to ZERO
- Comment:**
- Evaluator's Cue:**

- Performance Step: 9** Close CC 1467, CC OUTLET FROM DH COOLER 1, using HIS 1467.
- Standard:** Press CC 1467 CLOSE pushbutton. Observes green light ON, red light OFF
- Comment:**

Terminating Cue: **This JPM is complete.**

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM D

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant is in Mode 5, 70 psig and 125°F.
- Pressurizer level is 80 inches.
- Decay Heat Loop 1 is operating.

INITIATING CUE:

The Unit Supervisor directs you to swap from DH Loop 1 to DH Loop 2 for RCS Cooling per DB-OP-06012, DH/LPI Operating Procedure. Steps 3.11.1 – 3.11.7 are complete.

Facility: Davis-Besse Task No.: 045-012-01-0100

Task Title: Shutdown the Main
Turbine/Generator JPM No.: 2005 NRC JPM E

K/A Reference: 045 A3.11 2.6 / 2.9

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

- Initial Conditions:
- A plant shutdown is in progress in response to a severe weather warning.
 - The operating crew has completed Step 3.25 of DB-OP-06903, in preparation for removing the main turbine from service.

Task Standard: Main Turbine tripped and ACB OPEN.

Required Materials: DB-OP-06903, Pages 22 – 25.

General References: DB-OP-06903, Plant Shutdown and Cooldown, Revision 18

Initiating Cue: Beginning at the CAUTION statement prior to Step 3.26, remove the main turbine/generator from service.

Time Critical Task: NO

Validation Time: 7 minutes

SIMULATOR SETUP

- Turbine Generator synchronized at 10-20 Mwe.
- Controls aligned as if DB-OP-06903 has been performed up through Step 3.25.
- Block the automatic and manual opening of ACB 34560.

(Denote Critical Steps with a check mark)

START TIME: _____

Performance Step: 1 Read CAUTION Step 3.26.
Standard: Reads CAUTION before beginning Step 3.26.

Comment:

Evaluator's Cue: **Provide a copy of DB-OP-06903, pages 22 – 24.**

Performance Step: 2 Null GEN FIELD XFER VOLTS.
Standard: GEN FIELD XFER VOLTS Meter reads zero.

Comment:

Performance Step: 3 Place HIS 6011, VOLTAGE REG TRANSFER to MAN.
Standard: VOLTAGE REG TRANSFER selected to MAN.

Comment:

√ **Performance Step: 4** Trip the Turbine, using EMERGENCY TRIP pushbutton.
Standard: EMERGENCY TRIP pushbutton depressed.

Comment:

PERFORMANCE INFORMATION

Performance Step: 5 Check all Stop Valves and Control valves are closed.

Standard: Verifies all Stop Valves and Control Valves closed.

Comment:

Performance Step: 6 When annunciator 16-6-C, GEN REV PWR/ANTI-MTR TRIP alarms then perform the following:

Check:

- ACB 34560 is open using, HIS 6111.
- ACB 34561 is open using, HIS 6113.
- Power is not flowing on the main generator as indicated by (1) J1 6003 MEGAWATTS indicates zero; (2) XI6005 MEGAVARS indicates zero; (3) Turbine Generator speed is reducing below 1800 rpm.

Standard: Recognizes ACB 34560 did NOT open and attempts to open it using HIS 6111.

Comment:

√ **Performance Step: 7** If power is flowing on the main generator then take action to isolate the main generator from the grid:

Standard: Opens ACB 34563.

Comment:

Performance Step: 8 Verify the GENERATOR FIELD BREAKER is open, using HIS 6010.

Standard: Verifies GENERATOR FIELD BREAKER open.

Comment:

PERFORMANCE INFORMATION

Performance Step: 9 Verify the EXCITER FIELD BREAKER is open, using HIS 6021.

Standard: Verifies EXCITER FIELD BREAKER open.

Comment:

Terminating Cue: **The EXCITER FIELD BREAKER is verified open, this JPM is complete.**

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM E

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- A plant shutdown is in progress in response to a severe weather warning.
- The operating crew has completed Step 3.25 of DB-OP-06903, in preparation for removing the main turbine from service.

INITIATING CUE:

Beginning at the CAUTION statement prior to Step 3.26, remove the main turbine/generator from service.

Facility: Davis-Besse Task No.: 045-012-01-0100

Task Title: Shutdown the Main
Turbine/Generator JPM No.: 2005 NRC JPM E

K/A Reference: 045 A3.11 2.6 / 2.9

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

- Initial Conditions:
- A plant shutdown is in progress in response to a severe weather warning.
 - The operating crew has completed Step 3.25 of DB-OP-06903, in preparation for removing the main turbine from service.

Task Standard: Main Turbine tripped and ACB OPEN.

Required Materials: DB-OP-06903, Pages 22 – 25.

General References: DB-OP-06903, Plant Shutdown and Cooldown, Revision 18

Initiating Cue: Beginning at the CAUTION statement prior to Step 3.26, remove the main turbine/generator from service.

Time Critical Task: NO

Validation Time: 7 minutes

SIMULATOR SETUP

- Turbine Generator synchronized at 10-20 Mwe.
- Controls aligned as if DB-OP-06903 has been performed up through Step 3.25.
- Block the automatic and manual opening of ACB 34560.

(Denote Critical Steps with a check mark)

START TIME: _____

Performance Step: 1 Read CAUTION Step 3.26.
Standard: Reads CAUTION before beginning Step 3.26.

Comment:

Evaluator's Cue: **Provide a copy of DB-OP-06903, pages 22 – 24.**

Performance Step: 2 Null GEN FIELD XFER VOLTS.
Standard: Place MANUAL switch to LOWER until GEN FIELD XFER
VOLTS Meter reads zero.

Comment:

Performance Step: 3 Place HIS 6011, VOLTAGE REG TRANSFER to MAN.
Standard: VOLTAGE REG TRANSFER selected to MAN.

Comment:

√ **Performance Step: 4** Trip the Turbine, using EMERGENCY TRIP pushbutton.
Standard: EMERGENCY TRIP pushbutton depressed. Observes Green
RESET light OFF, Red TRIPPED light ON

Comment:

PERFORMANCE INFORMATION

Performance Step: 5 Check all Stop Valves and Control valves are closed.

Standard: Verifies all Stop Valves and Control Valves closed. Observes stop valve green indication, control valve 0% valve position

Comment:

Performance Step: 6 When annunciator 16-6-C, GEN REV PWR/ANTI-MTR TRIP alarms then perform the following:

Check:

- ACB 34560 is open using, HIS 6111.
- ACB 34561 is open using, HIS 6113.
- Power is not flowing on the main generator as indicated by (1) J1 6003 MEGAWATTS indicates zero; (2) XI6005 MEGAVARS indicates zero; (3) Turbine Generator speed is reducing below 1800 rpm.

Standard: Recognizes ACB 34560 did NOT open

Comment:

√ **Performance Step: 7** If power is flowing on the main generator then take action to isolate the main generator from the grid:

Standard: Obtains switch handle and rotates to TRIP position and Opens ACB 34563. Observes generator frequency lowering.

Comment:

Performance Step: 8 Verify the GENERATOR FIELD BREAKER is open, using HIS 6010.

Standard: Verifies GENERATOR FIELD BREAKER open by observing green light ON.

Comment:

PERFORMANCE INFORMATION

Performance Step: 9 Verify the EXCITER FIELD BREAKER is open, using HIS 6021.

Standard: Verifies EXCITER FIELD BREAKER open by observing green light ON.

Comment:

Terminating Cue: **The EXCITER FIELD BREAKER is verified open, this JPM is complete.**

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM E

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- A plant shutdown is in progress in response to a severe weather warning.
- The operating crew has completed Step 3.25 of DB-OP-06903, in preparation for removing the main turbine from service.

INITIATING CUE:

Beginning at the CAUTION statement prior to Step 3.26, remove the main turbine/generator from service.

Facility: Davis-Besse Task No.: 000-005-01-0100

Task Title: Energize Bus D2 from Bus D1 JPM No.: 2005 NRC JPM FK/A Reference: APE 056 AA2.14 (4.4/4.6)
064 A4.10 (3.3/3.4)

Examinee:

NRC Examiner:

Facility Evaluator:

Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

- Initial Conditions:
- A loss of off-site power has occurred.
 - Both AFW pumps are inoperable.
 - MU/HPI/PORV cooling has been initiated.
 - SBODG is unavailable.

Task Standard:

Required Materials: DB-OP-02000, Attachment 2

General References: DB-OP-02000, Revision 15

Initiating Cue: The US directs you to restore power to D2 bus from D1 bus in accordance with Attachment 2, Section 3.0 of DB-OP-02000 in order to start the MDFP.

Time Critical Task: NO

Validation Time: 15 minutes

SIMULATOR SETUP

Reset to IC:

Ensure F13 is supplied from F1.

(Denote Critical Steps with a check mark)

START TIME: _____

Performance Step: 1 Verify AD301, SBODG BKR is open in the Control Room.
Standard: Candidate verifies AD301, SBODG BKR is open in the Control Room.

Comment:

Performance Step: 2 Verify AD205, XFMR BDF6 is open in the Control Room.
Standard: Candidate verifies AD205, XFMR BDF6 is open in the Control Room.

Comment:

Performance Step: 3 Verify AD206, CLNG WTR PMP 2 is open in the Control Room.
Standard: Candidate verifies AD206, CLNG WTR PMP 2 is open in the Control Room.

Comment:

Performance Step: 4 Place AD201, STA AIR CMPRSR 2 in lock out in the Control Room.
Standard: Candidate places AD201, STA AIR CMPRSR 2 in lock out in the Control Room.

Comment:

PERFORMANCE INFORMATION

Performance Step: 5 Verify AD202, CLNG TWR MU PMP 2 is open in the Control Room.

Standard: Candidate verifies AD202, CLNG TWR MU PMP 2 is open in the Control Room.

Comment:

Performance Step: 6 Verify AD204, HTR DRN PMP 2 is open in the Control Room.

Standard: Candidate verifies AD204, HTR DRN PMP 2 is open in the Control Room.

Comment:

Performance Step: 7 Verify AD207, CNDS PMP 2 is open in the Control Room.

Standard: Candidate verifies AD207, CNDS PMP 2 is open in the Control Room.

Comment:

Performance Step: 8 Verify AD210, MOTOR DRIVEN FEED PUMP is open in the Control Room.

Standard: Candidate verifies AD210, MOTOR DRIVEN FEED PUMP is open in the Control Room.

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 9** Open AD110, HIS 6233, AD110. Place in trip. Verify green light ON, red light OFF.
- Standard:** Candidate opens AD110, HIS 6233, AD110 and places in trip. Verifies green light ON, red light OFF.
- Comment:**
-
- √ **Performance Step: 10** Place D1 SYNC SELECT in the BKR to D2 position. Locate and insert Synch key. Rotate to D2 position.
- Standard:** Candidate places D1 SYNC SELECT in the BKR to D2 position. Locates and inserts Synch key. Rotates to D2 position.
- Comment:**
-
- √ **Performance Step: 11** Close AD110, HIS 6233, AD110. Place in close, red ON, green OFF.
- Standard:** Candidate closes AD110, HIS 6233, AD110. Places in close, red ON, green OFF.
- Comment:**
-
- Performance Step: 12** Verify D2 is energized and check voltage.
- Standard:** Candidate verifies D2 is energized and checks voltage.
- Comment:**
-
- Performance Step: 13** Place D1 SYNC SELECT in the OFF position.
- Standard:** Candidate places D1 SYNC SELECT in the OFF position.
- Comment:**

- ✓ **Performance Step: 14** Close AD2DF7.
Standard: Candidate closes AD2DF7.
Comment:
- Performance Step: 15** Verify BDF7 is closed.
Standard: Candidate verifies BDF7 is closed.
Comment:
- Performance Step: 16** Determine load.
Standard: Candidate verifies load is approximately 2700 KW.
Comment: Applicant determines MU/HPI cooling is established (EDG is loaded with a MU Pump and HPI/LPI piggybacked), the EDG load shall be reduced to allow the MDFP to be started without exceeding the 200 hr rating of 2946 KW.
- Performance Step: 17** Verify CTMT lights de-energized.
Standard: Check CTMT light switches OFF.
Comment: **CTMT lights are off at power.**
- Performance Step: 18** Verify PWTP2 is OFF.
Standard:
Comment: **Primary Water System has been abandoned.**

Performance Step: 19 Verify CTMT Recirc Fan 2 is off.
Standard: Check CTMT Recirc Fan 2 switch.

Comment: Off due to initial loss of off-site power.

Performance Step: 20 Verify BAAT 2 Pump is off.
Standard: Check BAAT 2 Pump switch.

Comment:

Performance Step: 21 Verify essential Pressurizer heaters off.
Standard: Check Pressurizer heater switches off.

Comment: Heaters off due to MU/HPI feed and bleed lineup.

√ **Performance Step: 22:** Place turn Gear Motor in stop.
Standard: Candidate places turn gear motor in stop.

Comment:

√ **Performance Step: 23** Place Bearing Lift Pumps (6 pumps) in stop.
Standard: Candidate places Bearing lift Pumps in stop.

Comment:

PERFORMANCE INFORMATION

Performance Step: 24 Verify Hydrogen Dilution Blower 2 off.

Standard: Check Hydrogen Dilution Blower 2 switches off.

Comment: **Dilution Blower only started for LBLOCA.**

√ **Performance Step: 25** IF MCC F13 is on EDG 2, then place Turning Gear Pump in stop.
Standard: Candidate places Turning Gear Pump in stop.

Comment:

Terminating Cue: **When load stripping is complete in accordance with
Attachment 2, Section 6.0 this JPM is complete.**

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM F

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- A loss of off-site power has occurred.
- Both AFW pumps are inoperable.
- MU/HPI/PORV cooling has been initiated.
- SBODG is unavailable.

INITIATING CUE:

The US directs you to restore power to D2 bus from D1 bus in accordance with Attachment 2, Section 3.0 of DB-OP-02000 in order to start the MDFP.

Facility: Davis-Besse Task No.: 000-005-01-0100

Task Title: Energize Bus D2 from Bus D1 JPM No.: 2005 NRC JPM FK/A Reference: APE 056 AA2.14 (4.4/4.6)
064 A4.10 (3.3/3.4)

Examinee:

NRC Examiner:

Facility Evaluator:

Date:

Method of testing:Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____**READ TO THE EXAMINEE**

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

- Initial Conditions:
- A loss of off-site power has occurred.
 - Both AFW pumps are inoperable.
 - MU/HPI/PORV cooling has been initiated.
 - SBODG is unavailable.

Task Standard: Bus D2 is stripped and ready for starting the MDFP

Required Materials: DB-OP-02000, Attachment 2

General References: DB-OP-02000, Revision 15

Initiating Cue: The US directs you to restore power to D2 bus from D1 bus in accordance with Attachment 2, Section 3.0 of DB-OP-02000 in order to start the MDFP. Inform the US when the bus is ready for starting the MDFP

Time Critical Task: NO

Validation Time: 15 minutes

SIMULATOR SETUP

Reset to IC:

Ensure F13 is supplied from F1.

(Denote Critical Steps with a check mark)

START TIME: _____

Performance Step: 1 Verify AD301, SBODG BKR is open in the Control Room.
Standard: Candidate verifies AD301, SBODG BKR is open in the Control Room. Observes Green light on, red light off.

Comment:

Performance Step: 2 Verify AD205, XFMR BDF6 is open in the Control Room.
Standard: Candidate verifies AD205, XFMR BDF6 is open in the Control Room. Observes Green light on, red light off.

Comment:

Performance Step: 3 Verify AD206, CLNG WTR PMP 2 is open in the Control Room.
Standard: Candidate verifies AD206, CLNG WTR PMP 2 is open in the Control Room. Observes Green light on, red light off.

Comment:

Performance Step: 4 Place AD201, STA AIR CMPRSR 2 in lock out in the Control Room.
Standard: Candidate places AD201, STA AIR CMPRSR 2 in lock out in the Control Room.

Comment:

PERFORMANCE INFORMATION

Performance Step: 5 Verify AD202, CLNG TWR MU PMP 2 is open in the Control Room.

Standard: Candidate verifies AD202, CLNG TWR MU PMP 2 is open in the Control Room. Observes Green light on, red light off.

Comment:

Performance Step: 6 Verify AD204, HTR DRN PMP 2 is open in the Control Room.

Standard: Candidate verifies AD204, HTR DRN PMP 2 is open in the Control Room. Observes Green light on, red light off.

Comment:

Performance Step: 7 Verify AD207, CNDS PMP 2 is open in the Control Room.

Standard: Candidate verifies AD207, CNDS PMP 2 is open in the Control Room. Observes Green light on, red light off.

Comment:

Performance Step: 8 Verify AD210, MOTOR DRIVEN FEED PUMP is open in the Control Room.

Standard: Candidate verifies AD210, MOTOR DRIVEN FEED PUMP is open in the Control Room. Observes Green light on, red light off.

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 9** Open ABDD2, HIS 6228, ABDDP. Place in trip. Verify green light ON, red light OFF.
- Standard:** Candidate opens ABDD2, HIS 6228, ABDDP and places in trip. Verifies green light ON, red light OFF.
- Comment:**
-
- √ **Performance Step: 10** Place D1 SYNC SELECT in the BKR to D2 position. Locate and insert Synch key. Rotate to D2 position.
- Standard:** Candidate places D1 SYNC SELECT in the BKR to D2 position. Locates and inserts Synch key. Rotates to D2 position.
- Comment:**
-
- √ **Performance Step: 11** Close AD110, HIS 6233, AD110. Place in close, red ON, green OFF.
- Standard:** Candidate closes AD110, HIS 6233, ADD110. Places in close, red ON, green OFF.
- Comment:**
-
- Performance Step: 12** Verify D2 is energized and check voltage.
- Standard:** Candidate verifies D2 is energizes and checks voltage at approximately 4200 volts.
- Comment:**

PERFORMANCE INFORMATION

Performance Step: 13 Place D1 SYNC SELECT in the OFF position.
Standard: Candidate places D1 SYNC SELECT in the OFF position.

Comment:

Performance Step: 14 Close AD2DF7.
Standard: Candidate verifies AD2DF7 is closed.

Comment:

Performance Step: 15 Verify BDF7 is closed.
Standard: Candidate verifies BDF7 is closed.

Comment:

Performance Step: 16 Determine load.
Standard: Candidate verifies load is approximately 2700 KW.

Comment: Applicant determines MU/HPI cooling is established (EDG is loaded with a MU Pump and HPI/LPI piggybacked), the EDG load shall be reduced to allow the MDFP to be started without exceeding the 200 hr rating of 2946 KW.

Performance Step: 17 Verify CTMT lights de-energized.
Standard: Check CTMT light switches OFF.

Comment: **CTMT lights are off at power.**

Performance Step: 18 Verify PWTP2 is OFF.

Standard:

Comment: **Primary Water System has been abandoned.**

Performance Step: 19 Verify CTMT Recirc Fan 2 is off.

Standard: Check CTMT Recirc Fan 2 switch.

Comment: **Off due to initial loss of off-site power.**

Performance Step: 20 Verify BAAT 2 Pump is off.

Standard: Check BAAT 2 Pump switch.

Comment:

Performance Step: 21 Verify essential Pressurizer heaters off.

Standard: Check Pressurizer heater switches off.

Comment: **Heaters off due to MU/HPI feed and bleed lineup.**

√ **Performance Step 22:** Place turn Gear Motor in stop.

Standard: Candidate places turn gear motor in stop or lockout. Observes green light on if in stop, or green and amber lights on if in lockout

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 23** Place Bearing Lift Pumps (6 pumps) in stop.
Standard: Candidate places Bearing lift Pumps in stop or lockout.
Observes green light on if in stop, or green and amber lights on if in lockout

Comment:

- Performance Step: 24** Verify Hydrogen Dilution Blower 2 off.
Standard: Check Hydrogen Dilution Blower 2 switches off.

Comment: **Dilution Blower only started for LBLOCA.**

- √ **Performance Step: 25** IF MCC F13 is on EDG 2, then place Turning Gear Pump in stop.
Standard: Candidate places Turning Gear Pump in stop or lockout.
Observes green light on if in stop, or green and amber light son if in lockout

Comment:

Booth Operator Note:
When the Turning Gear Pump is in STOP/LOCKOUT, set the PLU for F13 to ZERO

Terminating Cue: **When load stripping is complete in accordance with Attachment 2, Section 6.0 this JPM is complete.**

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM F

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- A loss of off-site power has occurred.
- Both AFW pumps are inoperable.
- MU/HPI/PORV cooling has been initiated.
- SBODG is unavailable.

INITIATING CUE:

The US directs you to restore power to D2 bus from D1 bus in accordance with Attachment 2, Section 3.0 of DB-OP-02000 in order to start the MDFP. Inform the US when the bus is ready for starting the MDFP

Facility: Davis-Besse Task No.: 000-058-05-0100

Task Title: Monitor and Control CTMT
Conditions Using DB-OP-02000,
Table 3 JPM No.: 2005 NRC JPM G

K/A Reference: 022 A3.01 4.1 / 4.3

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

- Initial Conditions:
- A large LOCA caused an SFAS actuation.
 - The operating crew is at DB-OP-02000, Step 10.23.
 - Transfer to the emergency sump is complete.
 - Hydrogen analyzers have been placed in service.
 - Latest CTMT emergency sump boron sample is 2650 ppm.

Task Standard: CAC #1 running in slow and outlet control valve OPEN. H2 Dilution Blowers in operation

Required Materials: DB-OP-02000, Step 10.23 and Table 3, Revision 15
DB-OP-06016, Section 5.0, Revision 19
DB-OP-06502, Section 5.2, Revision 06

General References: DB-OP-02000, Revision 15

Initiating Cue: The Unit Supervisor has assigned you to perform DB-OP-02000, Step 10.23, Monitor and Control CTMT Conditions Using Table 3.
The Shift Manager has given permission to block and reposition components as necessary.

Time Critical Task: NO

Validation Time: 22 minutes

SIMULATOR SETUP

- Any at power I/C.
- Initiate a large break LOCA with a coincident loss of off-site power and Bus D1 on electrical fault.
- Perform actions to make it appear that the crew has been responding to the event.
- Block automatic start of CAC #1.
- CLOSE SW 1356.
- (If applicable) block automatic stroking of SW 1356 when CAC #1 is started manually.
- FREEZE simulator and snap I/C with CTMT Pressure between ACTION LEVEL 1 and ACTION LEVEL 2.

(Denote Critical Steps with a check mark)

START TIME: _____

Performance Step: 1 Review DB-OP-02000, Step 10.23.

Standard: Implement TABLE 3.

Comment:

Evaluator's Cue: **Provide a copy of Step 10.23 and then TABLE 3.**

Performance Step: 2 Determine CTMT Pressure.

Standard: Recognizes Action Level 1 applies (CTMT Pressure > 18.4 PSIA < 32 PSIA).

Comment:

Performance Step: 3 Verify SFAS Incident Level 1 through 3 using Table 2.

Standard:

Comment:

Evaluator's Cue: **Another RO is verifying SFAS Incident Level 1 through 3 actuation using Table 2. Perform the next step.**

PERFORMANCE INFORMATION

Performance Step: 4 Verify proper operation of Containment Air Coolers during SFAS level 2 Actuation. Refer to DB-OP-06016, Containment Air Cooling System Procedure.

Standard: Refers to DB-OP-06016 and determines Section 5.0 applies.

Comment:

Evaluator's Cue: **Provide a copy of DB-OP-06016, Section 5.0 when the Candidate determines that it applies.**

Performance Step: 5 Verify Prerequisite.

Standard: From initial conditions or current plant condition, determines SFAS Incident Level 2 has occurred.

Comment:

Performance Step: 6 Verify two Containment Air Cooler (CAC) Fans are running in SLOW speed.

Standard: Recognizes < two CAC Fans are running in SLOW speed.

Comment:

√ **Performance Step: 7** Shift CAC Fan #1 to SLOW speed.

Standard: Using HIS5031, places CAC #1 in SLOW.

Comment: **The Candidate may perform Step 8 before Step 7.**

PERFORMANCE INFORMATION

- √ **Performance Step: 8** Verify the running CAC Outlet Temperature Control Valves are OPEN.
- Standard:** Using HIS1356, fully opens SW 1356.
- Comment:**
-
- Performance Step: 9** Determine Containment Hydrogen concentration
- Standard:** Observes H2 meter and determines Hydrogen concentration is approximately 3.3%. Action level 2 applies
- Comment:**
- Evaluator's Cue:** **Hydrogen recombiner has been requested, but has not arrived on site.**
-
- Performance Step: 10** Refer to DB-OP-06502 for operation of Hydrogen Dilution Blowers
- Standard:** Refers to DB-OP-06502 and determines section 5.2 applies
- Comment:**
- Evaluator's Cue:** **Radiation Protection has determined that radiation levels prevent entry into the Mechanical Penetration Rooms.**
-
- √ **Performance Step: 11** Open CV-5090 using HIS5090, Containment Hydrogen Dilution Blower 1 isolation valve
- Standard:** Presses BLOCK to defeat SFAS 2 and the places valve in OPEN
- Comment:**

PERFORMANCE INFORMATION

√ **Performance Step: 12** Place HIS5067, H2 DILUTION SYS BLOWER 1, in START

Standard: Rotates control switch to START position, and observes blower operation

Comment:

√ **Performance Step: 13** Open CV-5065 using HIS5065, Containment Hydrogen Dilution Blower 2 isolation valve

Standard: Presses BLOCK to defeat SFAS 2 and the places valve in OPEN

Comment:

√ **Performance Step: 14** Place HIS5068, H2 DILUTION SYS BLOWER 2, in START

Standard: Rotates control switch to START position, and observes blower operation

Comment:

Terminating Cue: This JPM is complete.

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM G

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- A large LOCA caused on SFAS actuation.
- The operating crew is at DB-OP-02000, Step 10.23.
- Transfer to the emergency sump is complete.
- Hydrogen analyzers have been placed in service.
- Latest CTMT emergency sump boron sample is 2650 ppm.

INITIATING CUE:

The Unit Supervisor has assigned you to perform DB-OP-02000, Step 10.23, Monitor and Control CTMT Conditions Using Table 3.

The Shift Manager has given permission to block and reposition components as necessary.

Facility: Davis-Besse Task No.: 000-058-05-0100

Task Title: Monitor and Control CTMT
Conditions Using DB-OP-02000,
Table 3 JPM No.: 2005 NRC JPM G

K/A Reference: 022 A3.01 4.1 / 4.3

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

- Initial Conditions:
- A large LOCA caused an SFAS actuation.
 - The operating crew is at DB-OP-02000, Step 10.23.
 - Transfer to the emergency sump is complete.
 - Hydrogen analyzers have been placed in service.
 - Latest CTMT emergency sump boron sample is 2650 ppm.

Task Standard: CAC #1 running in slow and outlet control valve OPEN. H2 Dilution Blowers in operation

Required Materials: DB-OP-02000, Step 10.23 and Table 3, Revision 15
DB-OP-06016, Section 5.0, Revision 19
DB-OP-06502, Section 5.2, Revision 06

General References: DB-OP-02000, Revision 15

Initiating Cue: The Unit Supervisor has assigned you to perform DB-OP-02000, Step 10.23, Monitor and Control CTMT Conditions Using Table 3.
The Shift Manager has given permission to block and reposition components as necessary.

Time Critical Task: NO

Validation Time: 22 minutes

SIMULATOR SETUP

- Any at power I/C.
- Initiate a large break LOCA with a coincident loss of off-site power and Bus D1 on electrical fault.
- Perform actions to make it appear that the crew has been responding to the event.
- Block automatic start of CAC #1.
- CLOSE SW 1356.
- (If applicable) block automatic stroking of SW 1356 when CAC #1 is started manually.
- FREEZE simulator and snap I/C with CTMT Pressure between ACTION LEVEL 1 and ACTION LEVEL 2.

(Denote Critical Steps with a check mark)

START TIME: _____

Evaluator Note:

Candidate may complete all assessments of action level on the Table prior to performing action for action levels. In that case, the steps for this JPM are not listed in order.

Performance Step: 1 Review DB-OP-02000, Step 10.23.

Standard: Implement TABLE 3.

Comment:

Evaluator's Cue: **Provide a copy of Step 10.23 and then TABLE 3.**

Performance Step: 2 Determine CTMT Pressure.

Standard: Recognizes Action Level 1 applies (CTMT Pressure > 18.4 PSIA < 32 PSIA).

Comment:

Performance Step: 3 Verify SFAS Incident Level 1 through 3 using Table 2.

Standard:

Comment:

Evaluator's Cue: **Another RO is verifying SFAS Incident Level 1 through 3 actuation using Table 2. Continue with your actions.**

PERFORMANCE INFORMATION

Performance Step: 4 Verify proper operation of Containment Air Coolers during SFAS level 2 Actuation. Refer to DB-OP-06016, Containment Air Cooling System Procedure.

Standard: Refers to DB-OP-06016 and determines Section 5.0 applies.

Comment:

Performance Step: 5 Verify Prerequisite.

Standard: From initial conditions or current plant condition, determines SFAS Incident Level 2 has occurred.

Comment:

Performance Step: 6 Verify two Containment Air Cooler (CAC) Fans are running in SLOW speed.

Standard: Recognizes < two CAC Fans are running in SLOW speed.

Comment:

√ **Performance Step: 7** Shift CAC Fan #1 to SLOW speed.

Standard: Using HIS5031, places CAC #1 in SLOW. Observes SLOW Backlight illuminate

Comment: **The Candidate may place the CAC in STOP prior to placing in SLOW. If the candidate places the CAC in STOP and determines a 5 minute wait is necessary, provide a CUE that 5 minutes has elapsed.**

Comment: **The Candidate may perform Step 8 before Step 7.**

PERFORMANCE INFORMATION

√	Performance Step: 8	Verify the running CAC Outlet Temperature Control Valves are OPEN.
	Standard:	Using HIS 1356, fully opens SW 1356. Observes green light extinguish, red light illuminate. Verifies CAC flow
	Comment:	
	Evaluator's Cue:	When candidate reads precaution 2.2.6 and 2.2.7, provide a CUE that another RO will perform the action
	Performance Step: 9	Verify Containment Recirc Fans in service
	Standard:	Verifies operation by observing red lights illuminated, green lights extinguished
	Comment:	
	Performance Step: 10	Determine Containment Hydrogen concentration
	Standard:	Observes H2 meter and determines Hydrogen concentration is approximately 3.3%. Action level 2 applies
	Comment:	
	Evaluator's Cue:	Hydrogen recombiner has been requested, but has not arrived on site.
	Performance Step: 11	Refer to DB-OP-06502 for operation of Hydrogen Dilution Blowers
	Standard:	Refers to DB-OP-06502 and determines section 5.2 applies
	Comment:	
	Evaluator's Cue:	Radiation Protection has determined that radiation levels prevent entry into the Mechanical Penetration Rooms.

PERFORMANCE INFORMATION

- √ **Performance Step: 12** Open CV-5090 using HIS5090, Containment Hydrogen Dilution Blower 1 isolation valve
- Standard:** Presses BLOCK to defeat SFAS 2, observes BLOCK light goes bright for CV-5090 and CV-5038, and then places valve in OPEN. Observes CV-5090 BLOCK light flashes and Valve Red indication illuminates

Comment:

- √ **Performance Step: 13** Place HIS5067, H2 DILUTION SYS BLOWER 1, in START
- Standard:** Rotates control switch to START position, and observes blower operation. Observes Red light ON, Green light OFF

Comment:

- √ **Performance Step: 14** Open CV-5065 using HIS5065, Containment Hydrogen Dilution Blower 2 isolation valve
- Standard:** Presses BLOCK to defeat SFAS 2, observes BLOCK light goes bright for CV-5065 and CV-5037, and then places valve in OPEN. Observes CV-5065 BLOCK light flashes and Valve Red indication illuminates

Comment:

- √ **Performance Step: 14** Place HIS5068, H2 DILUTION SYS BLOWER 2, in START
- Standard:** Rotates control switch to START position, and observes blower operation. Observes red light ON, green light OFF

Comment:

Terminating Cue: This JPM is complete.

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM G

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- A large LOCA caused on SFAS actuation.
- The operating crew is at DB-OP-02000, Step 10.23.
- Transfer to the emergency sump is complete.
- Hydrogen analyzers have been placed in service.
- Latest CTMT emergency sump boron sample is 2650 ppm.

INITIATING CUE:

The Unit Supervisor has assigned you to perform DB-OP-02000, Step 10.23, Monitor and Control CTMT Conditions Using Table 3.

The Shift Manager has given permission to block and reposition components as necessary.

Facility: Davis-Besse Task No.: 075-003-01-0100

Task Title: Shift from Four to Two Circulating Water Pump Operation JPM No.: 2005 NRC JPM H

K/A Reference: 075 A2.02 2.5 / 2.7

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: The plant is at 28% power. Outside air temperature is 20°F. An Equipment Operator reports that ice is forming on the cooling tower.

Task Standard: Shutdown 2 of the 4 Circulating Water Pumps.

Required Materials: Copy of DB-OP-06232, current revision.

General References: DB-OP-06232, Circulating Water System and Cooling Tower Operation, Revision 10

Initiating Cue: The Unit Supervisor directs you to shift from four Circulating Water Pump to two Circulating Water Pump operation by stopping Circulating Water Pump 2 and Circulating Water Pump 3 in accordance with DB-OP-06232, Circulating Water System and Cooling Tower Operation. The procedure has been signed off through Step 3.7.7. An equipment operator is standing by at the Circulating Water Pumps.

Time Critical Task: NO

Validation Time: 18 minutes

SIMULATOR SETUP

Setup the simulator at 28% RTP.

Verify 4 Circ Water Pumps are running.

Verify the CW Makeup Tag is on CW Pump 1.

Verify the CW Blowdown Tag is on CW Pump 4.

Fail the breaker closed on the second Circ Water Pump to be stopped.

CW Pump 3 – imf kkp3p true

CW Pump 2 – imf kkp2p true

Delete the breaker failure when the EO is directed to trip the CW Pump locally.

CW Pump 3 – mmf kkp3p false

CW Pump 2 – mmf kkp2p false

(Denote Critical Steps with a check mark)

START TIME: _____

√ **Performance Step: 1** Throttle CT856, Circ Water Pump 1 Discharge.
Standard: Depress CLOSE on HIS856.

Comment: **Sequence for steps 1 through 4 is NOT critical.**

√ **Performance Step: 2** Throttle CT861, Circ Water Pump 2 Discharge.
Standard: Depress CLOSE on HIS861.

Comment:

√ **Performance Step: 3** Throttle CT868, Circ Water Pump 3 Discharge.
Standard: Depress CLOSE on HIS868.

Comment:

√ **Performance Step: 4** Throttle CT873, Circ Water Pump 4 Discharge.
Standard: Depress CLOSE on HIS873.

Comment:

PERFORMANCE INFORMATION

Performance Step: 5 Verify CT856, Circ Water Pump 1 Discharge, goes to the THROTTLE position.

Standard: HIS856 Amber THROT light is ON.

Comment:

Performance Step: 6 Verify CT861, Circ Water Pump 2 Discharge, goes to the THROTTLE position.

Standard: HIS861 Amber THROT light ON.

Comment:

Performance Step: 7 Verify CT868, Circ Water Pump 3 Discharge, goes to the THROTTLE position.

Standard: HIS868 Amber THROT light ON.

Comment:

Performance Step: 8 Verify CT873, Circ Water Pump 4 Discharge, goes to the THROTTLE position.

Standard: HIS873 Amber THROT light ON.

Comment:

Evaluator's Cue: **After completion of this step and the Candidate has read NOTE 3.7.10 for the purpose of expediting the examination schedule, assume that 10 minutes has elapsed.**

PERFORMANCE INFORMATION

- √ **Performance Step: 9** Close CT861 (868), Circ Water Pump 2 (3) Discharge.
Standard: Depress CLOSE on HIS861 (868).

Comment: **Sequence of stopping pumps is not critical. The second pump will not stop from the Control Room.**
- Performance Step: 10** Verify CT861 (868), Circ Water Pump 2 (3) Discharge, goes to the CLOSE position.
Standard: HIS CT861 (868) CLOSE light ON.

Comment:
- Performance Step: 11** Verify Circulating Water Pump 2 (3) stops.
Standard: GREEN light for Circulating Water Pump 2 (3).

Comment:
Evaluator's Cue: **For the purpose of expediting the examination schedule assume the Circulating Water Pump 2 (3) has been stopped for 5 minutes.**
- √ **Performance Step: 12** CLOSE CT868 (861), Circ Water Pump 3 (2) Discharge.
Standard: Depress CLOSE on HIS868 (861).

Comment:

PERFORMANCE INFORMATION

Performance Step: 13 Verify CT868 (861), Circ Water Pump 3 (2) Discharge, goes to the CLOSE position.

Standard: HIS868 (861) CLOSE light ON.

Comment:

Performance Step: 14 Recognize Circulating Water Pump 3 (2) did not stop.

Standard: CT868 (861), Circ Water Pump 3 (2) Discharge, closed for greater than 45 seconds and Circulating Water Pump 3 (2) continues to run.

Comment:

√ **Performance Step: 15** Direct the Equipment Operator to STOP Circulating Water Pump 3 (2).

Standard: Communicate via the gaitronics or radio.

Comment:

Evaluator's Cue: (After Circulating Water Pump 3 (2)) is stopped) the Shift Manager will write a condition report and make the appropriate notifications.

The Unit Supervisor directs you to continue with the procedure.

(If asked) the Unit Supervisor directs you to OPEN CT914 and CT915.

√ **Performance Step: 16** OPEN CT914, Cooling Tower Line 1 Bypass.

Standard: Depress OPEN on HIS914.

Comment: Sequence of Steps 16 and 17 are NOT critical.

PERFORMANCE INFORMATION

√ **Performance Step: 17** OPEN CT915, Cooling Tower Line 2 Bypass.

Standard: Depress OPEN on HIS915.

Comment:

Performance Step: 18 Direct an Equipment Operator to CLOSE CT77, Circulating Water Pump 2 Supply to Thrust Bearing Stop.

Standard: Communicate via the gaitronics or radio.

Comment: **Sequence of Steps 18 and 19 are NOT critical.**

Evaluator's Cue: **CT77 is CLOSED.**

Performance Step: 19 Direct an Equipment Operator to CLOSE CT99, Circulating Water Pump 3 Supply to Thrust Bearing Stop.

Standard: Communicate via the gaitronics or radio.

Comment:

Evaluator's Cue: **CT99 is CLOSED.**

Terminating Cue: **This JPM is complete.**

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM H

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: The plant is at 28% power. Outside air temperature is 20°F. An Equipment Operator reports that ice is forming on the cooling tower.

INITIATING CUE: The Unit Supervisor directs you to shift from four Circulating Water Pump to two Circulating Water Pump operation by stopping Circulating Water Pump 2 and Circulating Water Pump 3.in accordance with DB-OP-06232, Circulating Water System and Cooling Tower Operation. The procedure has been signed off through Step 3.7.7. An equipment operator is standing by at the Circulating Water Pumps.

Facility: Davis-Besse Task No.: 075-003-01-0100

Task Title: Shift from Four to Two Circulating Water Pump Operation JPM No.: 2005 NRC JPM H

K/A Reference: 075 A2.02 2.5 / 2.7

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: _____ Actual Performance: X
Classroom _____ Simulator X Plant _____

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: The plant is at 28% power. Outside air temperature is 20°F. An Equipment Operator reports that ice is forming on the cooling tower.

Task Standard: Shutdown 2 of the 4 Circulating Water Pumps.

Required Materials: Copy of DB-OP-06232, current revision.

General References: DB-OP-06232, Circulating Water System and Cooling Tower Operation, Revision 10

Initiating Cue: The Unit Supervisor directs you to shift from four Circulating Water Pump to two Circulating Water Pump operation by stopping Circulating Water Pump 2 and Circulating Water Pump 3.in accordance with DB-OP-06232, Circulating Water System and Cooling Tower Operation. The procedure has been signed off through Step 3.7.7. An equipment operator is standing by at the Circulating Water Pumps.

Time Critical Task: NO

Validation Time: 18 minutes

SIMULATOR SETUP

Setup the simulator at 28% RTP.

Verify 4 Circ Water Pumps are running.

Verify the CW Makeup Tag is on CW Pump 1.

Verify the CW Blowdown Tag is on CW Pump 4.

Fail the breaker closed on the second Circ Water Pump to be stopped.

CW Pump 3 – imf kkp3p true

CW Pump 2 – imf kkp2p true

Delete the breaker failure when the EO is directed to trip the CW Pump locally.

CW Pump 3 – mmf kkp3p false

CW Pump 2 – mmf kkp2p false

(Denote Critical Steps with a check mark)

START TIME: _____

√ **Performance Step: 1** Throttle CT856, Circ Water Pump 1 Discharge.
Standard: Depress CLOSE on HIS856. Waits to observe amber light to illuminate and verifies when lit

Comment: **Sequence for steps 1 through 4 is NOT critical.**

√ **Performance Step: 2** Throttle CT861, Circ Water Pump 2 Discharge.
Standard: Depress CLOSE on HIS861. Waits to observe amber light to illuminate and verifies when lit

Comment:

√ **Performance Step: 3** Throttle CT868, Circ Water Pump 3 Discharge.
Standard: Depress CLOSE on HIS868. Waits to observe amber light to illuminate and verifies when lit

Comment:

√ **Performance Step: 4** Throttle CT873, Circ Water Pump 4 Discharge.
Standard: Depress CLOSE on HIS873. Waits to observe amber light to illuminate and verifies when lit

Comment:

PERFORMANCE INFORMATION

Evaluator's Cue: After completion of this step and the Candidate has read NOTE 3.7.10, assume that 10 minutes has elapsed.

Note:

Candidate may announce stopping the pump

- √ **Performance Step: 5** Close CT861 (868), Circ Water Pump 2 (3) Discharge.
- Standard:**
- Depress CLOSE on HIS861 (868).
 - Verify CT861 (868), Circ Water Pump 2 (3) Discharge, goes to the CLOSE position.
 - Verify Circulating Water Pump 2 (3) stops by observing green light ON.

Comment: Sequence of stopping pumps is not critical. The second pump will not stop from the Control Room.

Evaluator's Cue: For the purpose of expediting the examination schedule assume the Circulating Water Pump 2 (3) has been stopped for 5 minutes.

Note:

Candidate may announce stopping the pump

- √ **Performance Step: 6** CLOSE CT868 (861), Circ Water Pump 3 (2) Discharge.
- Standard:**
- Depress CLOSE on HIS868 (861).
 - Verify CT868 (861), Circ Water Pump 3 (2) Discharge, goes to the CLOSE position.
 - Recognize Circulating Water Pump 3 (2) **did not stop** by observing discharge valve closed for >45 seconds and pump still running.

Comment:

PERFORMANCE INFORMATION

- √ **Performance Step: 7** Direct the Equipment Operator to STOP Circulating Water Pump 3 (2).
Standard: Communicate via the gaitronics or radio.
Comment:
Evaluator's Cue: **(After Circulating Water Pump 3 (2)) is stopped) the Shift Manager will write a condition report and make the appropriate notifications.**
The Unit Supervisor directs you to continue with the procedure.
(If asked) the Unit Supervisor directs you to OPEN CT914 and CT915.
- √ **Performance Step: 8** OPEN CT914, Cooling Tower Line 1 Bypass.
Standard: Depress OPEN on HIS914.
Comment: **Sequence of Steps 16 and 17 are NOT critical.**
- √ **Performance Step: 9** OPEN CT915, Cooling Tower Line 2 Bypass.
Standard: Depress OPEN on HIS915.
Comment:
- Performance Step: 10** Direct an Equipment Operator to CLOSE CT77, Circulating Water Pump 2 Supply to Thrust Bearing Stop.
Standard: Communicate via the gaitronics or radio.
Comment: **Sequence of Steps 18 and 19 are NOT critical.**
Evaluator's Cue: **CT77 is CLOSED.**

PERFORMANCE INFORMATION

Performance Step: 11 Direct an Equipment Operator to CLOSE CT99, Circulating Water Pump 3 Supply to Thrust Bearing Stop.

Standard: Communicate via the gaitronics or radio.

Comment:

Evaluator's Cue: CT99 is CLOSED.

Terminating Cue: This JPM is complete.

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM H

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: The plant is at 28% power. Outside air temperature is 20°F. An Equipment Operator reports that ice is forming on the cooling tower.

INITIATING CUE: The Unit Supervisor directs you to shift from four Circulating Water Pump to two Circulating Water Pump operation by stopping Circulating Water Pump 2 and Circulating Water Pump 3 in accordance with DB-OP-06232, Circulating Water System and Cooling Tower Operation. The procedure has been signed off through Step 3.7.7. An equipment operator is standing by at the Circulating Water Pumps.

PERFORMANCE INFORMATION

Facility: Davis-Besse Task No.: 000-048-05-0100

Task Title: Establish High Pressure Injection JPM No.: 2005 NRC JPM I
Alternate Minimum Recirc Flowpath

K/A Reference: System 006 2.1.30 3.9 / 3.4

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: X Actual Performance:
Classroom Simulator Plant X

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: A Loss of Coolant Accident caused a loss of Subcooling Margin. Subcooling Margin has been regained. Borated Water Storage Tank level is lowering at 1.5 feet/hour.

Task Standard: High Pressure Injection alternate minimum recirc flowpath is in service.

Required Materials: DB-OP-02000, Attachment 14

General References: DB-OP-02000, RPS, SFAS, SFRCS Trip, or Steam Generator Tube Rupture, Revision 15

Initiating Cue: The Unit Supervisor directs you place the High Pressure Injection alternate minimum recirc flowpath in service in accordance with Attachment 14 of DB-OP-02000, RPS, SFAS, SFRCS Trip, or Steam Generator Tube Rupture. The Shift Manager has given permission to operate locked valves during the lineup.

Time Critical Task: NO

Validation Time: 19 minutes

(Denote Critical Steps with a check mark)

START TIME: _____

Evaluator's Cue: Provide a copy of Attachment 14.

Performance Step: 1 Proceed to ECCS Room 2.

Standard: Use the Auxiliary Building Stairwell next to the elevator.

Comment:

Performance Step: 2 Record HPI Pump 2 discharge pressure.

Standard: Record pressure indicated on PIHP5A.

Comment:

Evaluator's Cue: PIH5A indicates 1800 psi.

√ **Performance Step: 3** Disable DH63.

Standard: Places HSDH63 in the DISABL position.

Comment:

Evaluator's Cue: HSDH63 RED disable pushbutton has been depressed.
HSDH63 GREEN enable pushbutton pops out.

Performance Step: 4 Record Decay Heat Pump 2 discharge pressure.

Standard: Record pressure indicated on PIDH5A.

Comment:

Evaluator's Cue: PIDH5A indicates 195 psi.

PERFORMANCE INFORMATION

Performance Step: 5 Record HPI Pump 2 alternate minimum recirc line pressure.

Standard: Record pressure indicated on PI3001.

Comment:

Evaluator's Cue: **PI3001 indicates 0 psi.**

√ **Performance Step: 6** Unlock and open HP94, HPI 2 Alternate Minimum Flow Line Upstream Isolation.

Standard: Unlock and rotate handwheel of HP94 in the counter-clockwise direction.

Evaluator's Cue: **HP94 has been unlocked. HP94 handwheel has been rotated in counter-clockwise direction. The valve stem is out.**

(If performed) HP94 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.

√ **Performance Step: 7** Unlock and OPEN HP95, HPI 2 Alternate Minimum Flow Line Downstream Isolation.

Standard: Unlock and rotate handwheel of HP95 in the counter-clockwise direction.

Evaluator's Cue: **HP95 has been unlocked. HP95 handwheel has been rotated in counter-clockwise direction. The valve stem and handwheel rise.**

(If performed) HP95 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.

Comment:

PERFORMANCE INFORMATION

Performance Step: 8 Record HPI Pump 2 alternate minimum recirc line pressure.
Standard: Record pressure indicated on PI3001.

Comment:

Evaluator's Cue: **PI3001 indicates 950 psi.**

Performance Step: 9 Notify the Control Room HPI 2 alternate minimum recirc line-up is complete.

Standard: Use gaitronics or radio to communicate with the Control Room.

Comment: **If proficiency is demonstrated, the Evaluator can choose to end the JPM prior to doing the other Train.**

Evaluator's Cue: **Control Room acknowledges HPI 2 alternate recirc line-up is complete.**

Performance Step: 10 Proceed to ECCS Room 1.

Standard: Proceed to ECCS Room 1.

Comment:

Performance Step: 11 Record HPI Pump 1 discharge pressure.

Standard: Record pressure indicated on PIHP5B.

Comment:

Evaluator's Cue: **PIH5B indicates 1800 psi.**

PERFORMANCE INFORMATION

- √ **Performance Step: 12** Disable DH64.
Standard: Places HSDH64 in the DISABL position.
Comment:
Evaluator's Cue: **HSDH64 RED disable pushbutton has been depressed.
HSDH64 GREEN enable pushbutton pops out.**
- Performance Step: 13** Record Decay Heat Pump 1 discharge pressure.
Standard: Record pressure indicated on PIDH05B.
Comment:
Evaluator's Cue: **(If necessary) the Shift Manager recognizes the gage nomenclature is incorrect and will initiate a procedure change condition report. The Shift Manager directs you to continue with the attachment.
PIDH05B indicates 195 psi.**
- Performance Step: 14** Record HPI Pump 1 alternate minimum recirc line pressure.
Standard: Record pressure indicated on PI3000.
Comment:
Evaluator's Cue: **PI3000 indicates 0 psi.**

PERFORMANCE INFORMATION

- ✓ **Performance Step: 15** Unlock and open HP91, HPI 1 Alternate Minimum Flow Line Upstream Isolation.
- Standard:** Unlock and rotate handwheel of HP91 in the counter-clockwise direction.
- Evaluator's Cue:** **HP91 has been unlocked. HP91 handwheel has been rotated in counter-clockwise direction. The valve stem is up.**
(If performed) HP91 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.
- ✓ **Performance Step: 16** Unlock and OPEN HP92, HPI 1 Alternate Minimum Flow Line Downstream Isolation.
- Standard:** Unlock and rotate handwheel of HP92 in the counter-clockwise direction.
- Evaluator's Cue:** **HP92 has been unlocked. HP92 handwheel has been rotated in counter-clockwise direction. The valve stem and handwheel rise.**
(If performed) HP92 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.
- Performance Step: 17** Record HPI Pump 1 alternate minimum recirc line pressure.
- Standard:** Record pressure indicated on PI3000.
- Comment:** **PI3000 indicates 950 psi.**

PERFORMANCE INFORMATION

Performance Step: 18 Notify the Control Room HPI 1 alternate minimum recirc line-up is complete.

Standard: Use gaitronics of radio to communicate with the Control Room.

Comment:

Evaluator's Cue: **Control Room acknowledges HPI 1 alternate recirc line-up is complete.**

Terminating Cue: **This JPM is complete.**

STOP TIME: _____

TIME CRITICAL STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM I

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: A Loss of Coolant Accident caused a loss of Subcooling Margin. Subcooling Margin has been regained. Borated Water Storage Tank level is lowering at 1.5 feet/hour.

INITIATING CUE: The Unit Supervisor directs you place the High Pressure Injection alternate minimum recirc flowpath in service in accordance with Attachment 14 of DB-OP-02000, RPS, SFAS, SFRCS Trip, or Steam Generator Tube Rupture. The Shift Manager has given permission to operate locked valves during the lineup.

PERFORMANCE INFORMATION

Facility: Davis-Besse Task No.: 000-048-05-0100

Task Title: Establish High Pressure Injection JPM No.: 2005 NRC JPM I
Alternate Minimum Recirc Flowpath

K/A Reference: System 006 2.1.30 3.9 / 3.4

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: X Actual Performance:
Classroom Simulator Plant X

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions: A Loss of Coolant Accident caused a loss of Subcooling Margin. Subcooling Margin has been regained. Borated Water Storage Tank level is lowering at 1.5 feet/hour.

Task Standard: High Pressure Injection alternate minimum recirc flowpath is in service.

Required Materials: DB-OP-02000, Attachment 14

General References: DB-OP-02000, RPS, SFAS, SFRCS Trip, or Steam Generator Tube Rupture, Revision 13

Initiating Cue: The Unit Supervisor directs you place the High Pressure Injection alternate minimum recirc flowpath in service in accordance with Attachment 14 of DB-OP-02000, RPS, SFAS, SFRCS Trip, or Steam Generator Tube Rupture. The Shift Manager has given permission to operate locked valves during the lineup.

Time Critical Task: NO

Validation Time: 19 minutes

(Denote Critical Steps with a check mark)

START TIME: _____

Evaluator's Cue: Provide a copy of Attachment 14.

Performance Step: 1 Proceed to ECCS Room 2.

Standard: Use the Auxiliary Building Stairwell next to the elevator.

Comment:

Performance Step: 2 Record HPI Pump 2 discharge pressure.

Standard: Record pressure indicated on PIHP5A.

Comment:

Evaluator's Cue: PIH5A indicates 1800 psi.

√ **Performance Step: 3** Disable DH63.

Standard: Places HSDH63 in the DISABL position.

Comment: DH 63 red indicating light will be lit before and after disabling the valve

Evaluator's Cue: (If necessary) the Shift Manager recognizes the switch nomenclature is incorrect and will initiate a procedure change condition report. The Shift Manager directs you to continue with the attachment.

HSDH63 RED disable pushbutton has been depressed.
HSDH63 GREEN enable pushbutton pops out.

PERFORMANCE INFORMATION

Performance Step: 4 Record Decay Heat Pump 2 discharge pressure.

Standard: Record pressure indicated on PIDH5A.

Comment:

Evaluator's Cue: PIDH5A indicates 195 psi.

Performance Step: 5 Record HPI Pump 2 alternate minimum recirc line pressure.

Standard: Record pressure indicated on PI3001.

Comment:

Evaluator's Cue: PI3001 is as indicated.

√ **Performance Step: 6** Unlock and open HP94, HPI 2 Alternate Minimum Flow Line Upstream Isolation.

Standard: Unlock and rotate handwheel of HP94 in the counter-clockwise direction.

Evaluator's Cue: HP94 has been unlocked. HP94 handwheel has been rotated in counter-clockwise direction. The valve stem is out.

(If performed) HP94 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.

PERFORMANCE INFORMATION

√	Performance Step: 7	Unlock and OPEN HP95, HPI 2 Alternate Minimum Flow Line Downstream Isolation.
	Standard:	Unlock and rotate handwheel of HP95 in the counter-clockwise direction.
	Evaluator's Cue:	HP95 has been unlocked. HP95 handwheel has been rotated in counter-clockwise direction. The valve stem and handwheel rise. (If performed) HP95 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.
	Comment:	
	Performance Step: 8	Record HPI Pump 2 alternate minimum recirc line pressure.
	Standard:	Record pressure indicated on PI3001.
	Comment:	
	Evaluator's Cue:	PI3001 indicates 950 psi.
	Performance Step: 9	Notify the Control Room HPI 2 alternate minimum recirc line-up is complete.
	Standard:	Use gaitronics or radio to communicate with the Control Room.
	Comment:	If proficiency is demonstrated, the Evaluator can choose to end the JPM prior to doing the other Train.
	Evaluator's Cue:	Control Room acknowledges HPI 2 alternate recirc line-up is complete.
	Performance Step: 10	Proceed to ECCS Room 1.
	Standard:	Proceed to ECCS Room 1.
	Comment:	

PERFORMANCE INFORMATION

Performance Step: 11 Record HPI Pump 1 discharge pressure.

Standard: Record pressure indicated on PIHP5B.

Comment:

Evaluator's Cue: PIH5B indicates 1800 psi.

√ **Performance Step: 12** Disable DH64.

Standard: Places HSDH64 in the DISABL position.

Comment: DH 64 indicating light will be red before and after disabling the valve

Evaluator's Cue: (If necessary) the Shift Manager recognizes the switch nomenclature is incorrect and will initiate a procedure change condition report. The Shift Manager directs you to continue with the attachment.

HSDH64 RED disable pushbutton has been depressed.
HSDH64 GREEN enable pushbutton pops out.

Performance Step: 13 Record Decay Heat Pump 1 discharge pressure.

Standard: Record pressure indicated on PIDH05B.

Comment:

Evaluator's Cue: (If necessary) the Shift Manager recognizes the gage nomenclature is incorrect and will initiate a procedure change condition report. The Shift Manager directs you to continue with the attachment.

PIDH05B indicates 195 psi.

PERFORMANCE INFORMATION

Performance Step: 14 Record HPI Pump 1 alternate minimum recirc line pressure.

Standard: Record pressure indicated on PI3000.

Comment:

Evaluator's Cue: **PI3000 is as indicated.**

√ **Performance Step: 15** Unlock and open HP91, HPI 1 Alternate Minimum Flow Line Upstream Isolation.

Standard: Unlock and rotate handwheel of HP91 in the counter-clockwise direction.

Evaluator's Cue: **HP91 has been unlocked. HP91 handwheel has been rotated in counter-clockwise direction. The valve stem is up.**
(If performed) HP91 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.

√ **Performance Step: 16** Unlock and OPEN HP92, HPI 1 Alternate Minimum Flow Line Downstream Isolation.

Standard: Unlock and rotate handwheel of HP92 in the counter-clockwise direction.

Evaluator's Cue: **HP92 has been unlocked. HP92 handwheel has been rotated in counter-clockwise direction. The valve stem and handwheel rise.**
(If performed) HP92 handwheel has been rotated in the clockwise direction ¼ turn. Not critical to close ¼ turn.

Performance Step: 17 Record HPI Pump 1 alternate minimum recirc line pressure.

Standard: Record pressure indicated on PI3000.

Comment: **PI3000 indicates 950 psi.**

PERFORMANCE INFORMATION

Performance Step: 18 Notify the Control Room HPI 1 alternate minimum recirc line-up is complete.

Standard: Use gaitronics of radio to communicate with the Control Room.

Comment:

Evaluator's Cue: **Control Room acknowledges HPI 1 alternate recirc line-up is complete.**

Terminating Cue: **This JPM is complete.**

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM I

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS: A Loss of Coolant Accident caused a loss of Subcooling Margin. Subcooling Margin has been regained. Borated Water Storage Tank level is lowering at 1.5 feet/hour.

INITIATING CUE: The Unit Supervisor directs you place the High Pressure Injection alternate minimum recirc flowpath in service in accordance with Attachment 14 of DB-OP-02000, RPS, SFAS, SFRCS Trip, or Steam Generator Tube Rupture. The Shift Manager has given permission to operate locked valves during the lineup.

Facility: Davis-Besse Task No.: E0

Task Title: Initiate a Reactor Trip From the Low Voltage Switchgear Room JPM No.: 2005 NRC JPM J

K/A Reference: System 001 2.1.30 3.9 / 3.4 Facility Bank JPM 042

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: X Actual Performance:
Classroom Simulator Plant X

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant has just experienced a severe transient causing a reactor trip signal to be generated.
- The reactor did not trip.
- Control power problems have prevented the Control Room from de-energizing E2 and F2.

Task Standard: Reactor trip initiated from Low Voltage Switchgear Room.

Required Materials: DB-OP-02000, Section 3.0

General References: DB-OP-02000-RPS, SFAS, SFRCS Trip or SG Tube Rupture, Rev. 15

Initiating Cue: The Unit Supervisor directs you to proceed to the Low Voltage Switchgear Rooms to de-energize the CRD in accordance with Step 3.3 of DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture.

Time Critical Task: NO

Validation Time: 5 minutes

(Denote Critical Steps with a check mark)

START TIME: _____

Note: Critical steps denoted with a √. Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT required unless denoted in the "Comments".

Performance Step: 1 Recognize the correct procedure section.
Standard: Recognizes DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture, Section 3 as correct procedure section and proceed to the Low Voltage Switchgear Rooms.

Comment:

Evaluator's Cue: Hand the trainee a copy of Section 3 of DB-OP-02000.

√ **Performance Step: 2** Trip CRD Breaker A.
Standard: Push the TRIP pushbutton on CRD Breaker A.

Note: This Step critical if Step 6 not performed.

Comment: Order of Steps 2, 3, and 4 not critical.

Evaluator's Cue: TRIP pushbutton has been pushed on CRD Breaker A. Green TRIP flag is visible.

√ **Performance Step: 3** Trip CRD Breaker C.
Standard: Push the TRIP pushbutton on CRD Breaker C.

Note: This step critical if Step 6 not performed.

Comment: Order of Steps 2, 3, and 4 not critical.

Evaluator's Cue: TRIP pushbutton has been pushed on CRD Breaker C. Green TRIP flag is visible. The reactor has NOT tripped.

PERFORMANCE INFORMATION

Performance Step: 4 Trip CRD Breaker B.

Standard: Push the TRIP pushbutton on CRD Breaker B.

Comment: Order of Steps 2, 3, and 4 not critical.

Evaluator's Cue: Trip pushbutton has been pushed on CRD Breaker B. Green TRIP flag is NOT visible. The reactor has NOT tripped.

√ **Performance Step: 5** OPEN Breaker BE 211.

Standard: Press "TRIP" pushbutton on BE 211 at Bus E2.

Comment: Order of Steps 5 and 6 not critical.

CRD Breaker B and D failed to OPEN. The reactor will trip when Breaker BE211 is OPENED.

Evaluator's Cue: TRIP pushbutton has been pressed on BE211 GREEN TRIP flag is visible. The reactor has tripped.

√ **Performance Step: 6** OPEN Breaker BF 211.

Standard: Press "TRIP" pushbutton on BF 211 at Bus F2.

Note: This Step critical if Steps 2 and 3 not performed.

Comment: Order of Steps 5 and 6 not critical.

Evaluator's Cue: TRIP pushbutton has been pressed on BF 211.

Green TRIP flag is visible.

(If BE 211 has NOT been TRIPPED, the Reactor is NOT TRIPPED.)

(If BE 211 has been TRIPPED, the Reactor is TRIPPED.)

Terminating Cue: This JPM is complete.

STOP TIME:

2005 NRC JPM J

TIME CRITICAL STOP TIME:

NUREG 1021, Revision 9

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM J

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant has just experienced a severe transient causing a reactor trip signal to be generated.
- The reactor did not trip.
- Control power problems have prevented the Control Room from de-energizing E2 and F2.

INITIATING CUE:

The Unit Supervisor directs you to proceed to the Low Voltage Switchgear Rooms to de-energize the CRD in accordance with Step 3.3 of DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture.

Facility: Davis-Besse Task No.: E0

Task Title: Initiate a Reactor Trip From the Low Voltage Switchgear Room JPM No.: 2005 NRC JPM J

K/A Reference: System 001 2.1.30 3.9 / 3.4 Facility Bank JPM 042

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: X Actual Performance:
Classroom Simulator Plant X

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant has just experienced a severe transient causing a reactor trip signal to be generated.
- The reactor did not trip.
- Control power problems have prevented the Control Room from de-energizing E2 and F2.

Task Standard: Reactor trip initiated from Low Voltage Switchgear Room.

Required Materials: DB-OP-02000, Section 3.0

General References: DB-OP-02000-RPS, SFAS, SFRCS Trip or SG Tube Rupture, Rev. 13

Initiating Cue: The Unit Supervisor directs you to proceed to the Low Voltage Switchgear Rooms to de-energize the CRD in accordance with Step 3.3 of DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture.

Time Critical Task: NO

Validation Time: 8 Minutes

(Denote Critical Steps with a check mark)

START TIME: _____

Note: Critical steps denoted with a √. Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT required unless denoted in the "Comments".

Performance Step: 1 Recognize the correct procedure section.

Standard: Recognizes DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture, Section 3 as correct procedure section and proceed to the Low Voltage Switchgear Rooms.

Comment:

Evaluator's Cue: Hand the trainee a copy of Section 3 of DB-OP-02000.

√ **Performance Step: 2** Trip CRD Breaker A.

Standard: Push the TRIP pushbutton on CRD Breaker A.

Note: This Step critical if Step 6 not performed.

Comment:

Evaluator's Cue: TRIP pushbutton has been pushed on CRD Breaker A. Green TRIP flag is visible.

√ **Performance Step: 3** Trip CRD Breaker C.

Standard: Push the TRIP pushbutton on CRD Breaker C.

Note: This step critical if Step 6 not performed.

Comment:

Evaluator's Cue: TRIP pushbutton has been pushed on CRD Breaker C. Green TRIP flag is visible. The reactor has NOT tripped.

PERFORMANCE INFORMATION

Performance Step: 4 Trip CRD Breaker B.

Standard: Push the TRIP pushbutton on CRD Breaker B.

Comment:

Evaluator's Cue: Trip pushbutton has been pushed on CRD Breaker B. Green TRIP flag is NOT visible. If candidate calls control room, inform them that the reactor has NOT tripped.

√ **Performance Step: 5** OPEN Breaker BE 211.

Standard: Press "TRIP" pushbutton on BE 211 at Bus E2.

Comment: CRD Breaker B and D failed to OPEN. The reactor will trip when Breaker BE211 is OPENED.

Evaluator's Cue: TRIP pushbutton has been pressed on BE211 GREEN TRIP flag is visible. If candidate calls control room, inform them that the reactor has tripped.

√ **Performance Step: 6** OPEN Breaker BF 211.

Standard: Press "TRIP" pushbutton on BF 211 at Bus F2.

Note: This Step critical if Steps 3 and 4 not performed.

Comment:

Evaluator's Cue: TRIP pushbutton has been pressed on BF 211.

Green TRIP flag is visible.

(If BE 211 has NOT been TRIPPED, the Reactor is NOT TRIPPED.)

(If BE 211 has been TRIPPED, if candidate calls control room, inform them that the reactor has tripped.)

Terminating Cue: This JPM is complete.

STOP TIME: _____

VERIFICATION OF COMPLETION

Job Performance Measure No.: 2005 NRC JPM J

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant has just experienced a severe transient causing a reactor trip signal to be generated.
- The reactor did not trip.
- Control power problems have prevented the Control Room from de-energizing E2 and F2.

INITIATING CUE:

The Unit Supervisor directs you to proceed to the Low Voltage Switchgear Rooms to de-energize the CRD in accordance with Step 3.3 of DB-OP-02000, RPS, SFAS, SFRCS Trip or SG Tube Rupture.

Facility: Davis-Besse Task No.: EO

Task Title: Exercise and Reset the Overspeed Mechanism for an AFPT JPM No.: 2005 NRC JPM K

K/A Reference: System 061 2.1.30 3.9 / 3.4 Facility Bank JPM 075

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: X Actual Performance:

Classroom Simulator Plant X

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant is in the process of starting up.
- Auxiliary Feedwater Train 1 is being placed in service using DB-OP-06233, Auxiliary Feedwater System.

Task Standard: Overspeed mechanism for AFPT 1 is reset.

Required Materials: DB-OP-06233, Section 3.1

General References: DB-OP-06233, Auxiliary Feedwater System, Revision 18

Initiating Cue: The Shift Supervisor directs you to exercise and reset the overspeed mechanism for No. 1 AFPT.

All prerequisites and procedure steps have been completed up through, and including, Step 3.1.10 of DB-OP-06233.

Time Critical Task: NO

Validation Time: 10 minutes

(Denote Critical Steps with a check mark)

START TIME: _____

Note: Critical steps denoted with a √. Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT required unless denoted in the "Comments".

√ **Performance Step: 1** Trip ICS 38C, AFPT 1 Trip Throttle Valve.

Standard: Push the manual trip lever.

Comment: Sequence is critical; must be done first.

Evaluator's Cue: The manual trip lever has been DEPRESSED. ICS 38C, AFPT 1 Trip Throttle Valve, latch RELEASES and the valve is TRIPPED.

Performance Step: 2 Verify computer points Z001 and S007 are in alarm and annunciators AFP 1 TRBL (10-4-G) and AFPT 1 OVRSPD TRIP (10-2-G) are lit.

Standard: Contacts the Control Room.

Comment:

Evaluator's Cue: CTRM reports:

- AFP 1 TRBL (10-4-G) is LIT.
- Z001 indicates "TRBL".
- S007 indicates "TRIP".
- AFPT 1 OVRSPD TRIP (10-2-G) is LIT.

- √ **Performance Step: 3** Pull the Connecting Rod, using the handle, past the "Reset" position while depressing the trip tappet down.
- Standard:** Pulls the connecting rod past the RESET position while depressing the trip tappet and then releases.
- Comment:** **This step must be done prior to Step 4.**
- Evaluator's Cue:** **The trip tappet is depressed.**
The connecting rod has been pulled past the RESET position and RELEASED.
(If asked) the pointer indicates to the left of RESET.
- Performance Step: 4** Unseal ICS 38C, AFPT 1 TRIP THROTTLE.
- Standard:** Removes seal.
- Comment:**
- Evaluator's Cue:** **The seal is removed.**
- √ **Performance Step: 5** Turn ICS 38C, AFPT 1 TRIP THROTTLE, handwheel clockwise until the Latch-Up Lever contacts stop on the valve yoke AND the handwheel will turn no further.
- Standard:** Turn ICS 38C, AFPT 1 Trip Throttle Valve, clockwise until the handwheel will turn no further.
- Comment:**
- Evaluator's Cue:** **The Latch-up Lever has contacted the stop on the valve yoke.**

Performance Step: 6 Push on the Trip Hook until there is NO gap.
Standard: Pushes on Trip Hook and verifies there is no gap or push on the Trip Hook.

Comment:

Evaluator's Cue: The Trip Hook has been PUSHED. There is NO gap.

Performance Step: 7 Verify the Latch-up Lever AND Trip Hook are completely engaged.

Standard: Verifies complete engagement.

Comment:

Evaluator's Cue: The Latch-up Lever and Trip Hook are completely engaged.

Performance Step: 8 Verify the reset arrow on the RESET/TRIP indicator aligns with the corresponding pointer on the connecting rod.

Standard: Check RESET arrow aligned with pointer on connecting rod.

Comment:

Evaluator's Cue: The pointer is aligned to the RESET arrow.

√ **Performance Step: 9** Open ICS 38C, AFPT 1 Trip Throttle Valve.
Standard: Turn handwheel counter-clockwise until completely OPEN.

Comment: Steps 3 and 4 must be performed prior to this step.

Evaluator's Cue: ICS 38C has been rotated counter-clockwise and will move no further.

- √ **Performance Step: 10** Close ICS 38C, AFPT 1 Trip Throttle Valve, ¼ turn.
Standard: Rotate handwheel ¼ turn in the clockwise direction.
- Comment:** **Step 7 must be completed prior to Step 8.**
Evaluator's Cue: **ICS 38C has been rotated ¼ turn clockwise.**
- Performance Step: 11** Seal ICS 38C, AFPT 1 Trip Throttle Valve.
Standard: Proper use of sealing equipment.
- Comment:**
Evaluator's Cue: **The trip throttle valve is sealed.**
- Performance Step: 12** Have ICS 38C, AFPT 1 Trip Throttle Valve, independently verified OPEN.
Standard: Locate a second qualified operator or contacts Control Room to accomplish this step.
- Comment:**
Evaluator's Cue: **ICS 38C has been independently verified.**
- Performance Step: 13** Verify speed droop knob is set at 0 and load limit knob is set at 10.
Standard: Observe setting of speed droop knob and load limit knob.
- Comment:**
Evaluator's Cue: **Speed droop knob is set at 0.**
Load limit knob is set at 10.

Job Performance Measure No.: 2005 NRC JPM K

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant is in the process of starting up.
- Auxiliary Feedwater Train 1 is being placed in service using DB-OP-062333, Auxiliary Feedwater System.

INITIATING CUE:

The Shift Supervisor directs you to exercise and reset the overspeed mechanism for No. 1 AFPT.

All prerequisites and procedure steps have been completed up through, and including, Step 3.1.10 of DB-OP-062333.

Facility: Davis-Besse Task No.:

Task Title: Exercise and Reset the Overspeed Mechanism for an AFPT JPM No.: 2005 NRC JPM K

K/A Reference: System 061 2.1.30 3.9 / 3.4 Facility Bank JPM 075

Examinee: NRC Examiner:

Facility Evaluator: Date:

Method of testing:

Simulated Performance: X Actual Performance:
Classroom Simulator Plant X

READ TO THE EXAMINEE

I will explain the initial conditions, which steps to simulate or discuss, and provide initiating cues. When you complete the task successfully, the objective for this Job Performance Measure will be satisfied.

Initial Conditions:

- The plant is in the process of starting up.
- Auxiliary Feedwater Train 1 is being placed in service using DB-OP-06233, Auxiliary Feedwater System.

Task Standard: Overspeed mechanism for AFPT 1 is reset.

Required Materials: DB-OP-062333, Section 3.1

General References: DB-OP-062333, Auxiliary Feedwater System, Revision 16

Initiating Cue: The Shift Supervisor directs you to exercise and reset the overspeed mechanism for No. 1 AFPT.
All prerequisites and procedure steps have been completed up through Step 3.1.10 of DB-OP-06233.

Time Critical Task: NO

Validation Time: 12 Minutes

(Denote Critical Steps with a check mark)

START TIME: _____

Note: Critical steps denoted with a √. Failure to meet any one of these standards for this item constitutes failure. Sequence is NOT required unless denoted in the "Comments".

√ **Performance Step: 1** Trip ICS 38C, AFPT 1 Trip Throttle Valve.

Standard: Push the manual trip lever.

Comment: Sequence is critical; must be done first.

Evaluator's Cue: The manual trip lever has been DEPRESSED. ICS 38C, AFPT 1 Trip Throttle Valve, latch RELEASES and the valve is TRIPPED.

Performance Step: 2 Verify computer points Z001 and S007 are in alarm and annunciators AFP 1 TRBL (10-4-G) and AFPT 1 OVRSPD TRIP (10-2-G) are lit.

Standard: Contacts the Control Room.

Comment:

Evaluator's Cue: CTRM reports:

- AFP 1 TRBL (10-4-G) is LIT.
- Z001 indicates "TRBL".
- S007 indicates "TRIP".
- AFPT 1 OVRSPD TRIP (10-2-G) is LIT.

- √ **Performance Step: 3** Pull the Connecting Rod, using the handle, past the "Reset" position while depressing the trip tappet down.
- Standard:** Pulls the connecting rod past the RESET position while depressing the trip tappet and then releases.
- Comment:** **This step must be done prior to Step 4.**
- Evaluator's Cue:** **The trip tappet is depressed.**
The connecting rod has been pulled past the RESET position and RELEASED.
(If asked) the pointer indicates to the left of RESET.
- Performance Step: 4** Unseal ICS 38C, AFPT 1 TRIP THROTTLE.
- Standard:** Removes seal.
- Comment:**
- Evaluator's Cue:** **The seal is removed.**
- √ **Performance Step: 5** Turn ICS 38C, AFPT 1 TRIP THROTTLE, handwheel clockwise until the Latch-Up Lever contacts stop on the valve yoke AND the handwheel will turn no further.
- Standard:** Turn ICS 38C, AFPT 1 Trip Throttle Valve, clockwise until the handwheel will turn no further.
- Comment:**
- Evaluator's Cue:** **The Latch-up Lever has contacted the stop on the valve yoke.**

Performance Step: 6 Push on the Trip Hook until there is NO gap.
Standard: Pushes on Trip Hook and verifies there is no gap or push on the Trip Hook.

Comment:

Evaluator's Cue: **The Trip Hook has been PUSHED. There is NO gap.**

Performance Step: 7 Verify the Latch-up Lever AND Trip Hook are completely engaged.

Standard: Verifies complete engagement.

Comment:

Evaluator's Cue: **The Latch-up Lever and Trip Hook are completely engaged.**

Performance Step: 8 Verify the reset arrow on the RESET/TRIP indicator aligns with the corresponding pointer on the connecting rod.

Standard: Check RESET arrow aligned with pointer on connecting rod.

Comment:

Evaluator's Cue: **The pointer is aligned to the RESET arrow.**

√ **Performance Step: 9** Open ICS 38C, AFPT 1 Trip Throttle Valve.
Standard: Turn handwheel counter-clockwise until completely OPEN.

Comment: **Steps 3 and 4 must be performed prior to this step.**

Evaluator's Cue: **ICS 38C has been rotated counter-clockwise and will move no further.**

Performance Step: 10 Close ICS 38C, AFPT 1 Trip Throttle Valve, ¼ turn.
Standard: Rotate handwheel ¼ turn in the clockwise direction.

Comment: Step 7 must be completed prior to Step 8.
Evaluator's Cue: ICS 38C has been rotated ¼ turn clockwise.

Performance Step: 11 Seal ICS 38C, AFPT 1 Trip Throttle Valve.
Standard: Proper use of sealing equipment.

Comment:
Evaluator's Cue: The trip throttle valve is sealed.

Performance Step: 12 Have ICS 38C, AFPT 1 Trip Throttle Valve, independently verified OPEN.
Standard: Locate a second qualified operator or contacts Control Room to accomplish this step.

Comment:
Evaluator's Cue: ICS 38C has been independently verified.

Performance Step: 13 Verify speed droop knob is set at 0 and load limit knob is set at 10.
Standard: Observe setting of speed droop knob and load limit knob.

Comment:
Evaluator's Cue: Speed droop knob is set at 0.
Load limit knob is set at 10.

Performance Step: 14 Verify annunciators AFPT 1 OVRSPD TRIP (10-2-G) is not lit and Computer Points Z001 and S007 indicate NORM.

Standard: Contact the Control Room.

Comment:

Evaluator's Cue:	CTRM reports:	<ul style="list-style-type: none"> - AFPT 1 OVRSPD TRIP (10-2-G) is EXTINGUISHED. - Z001 indicates NORM. - S007 indicates NORM.
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Terminating Cue: This JPM is complete.

STOP TIME:

Job Performance Measure No.: 2005 NRC JPM K

Examinee's Name:

Date Performed:

Facility Evaluator:

Number of Attempts:

Time to Complete:

Question Documentation:

Question:

Response:

Result: SAT _____ UNSAT _____

Examiner's Signature: _____ Date: _____

INITIAL CONDITIONS:

- The plant is in the process of starting up.
- Auxiliary Feedwater Train 1 is being placed in service using DB-OP-062333, Auxiliary Feedwater System.

INITIATING CUE:

The Shift Supervisor directs you to exercise and reset the overspeed mechanism for No. 1 AFPT.

All prerequisites and procedure steps have been completed up through Step 3.1.10 of DB-OP-06233. Begin at Step 3.1.11.