

# **Simulator JPM S1**

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

**Task Title:** Establish long term boron dilution using the High Pressure Injection Aux spray method

**K/A Reference:** (006) A4.07 4.4/4.4 **Job Performance Measure No:** S1 (OPSJPM160)

**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 conditions are specified in the Initial Conditions and Initiating Cues.

**Task Standard:**

Establish long term boron dilution using the Alternate Method.

**Required Materials:**

Copy of Attachment 12 of DB-OP-02000 with Step 1 signed off

**General References:**

None

**Initiating Cue:**

The plant conditions are specified in the Initial Conditions and Initiating Cues.

**Time Critical Task:**

No

**Alternate Path:**

Yes

**Validation Time:**

20 Minutes

**SIMULATOR INSTRUCTIONS****TASK DESCRIPTION:**

Establish long term boron dilution using the High Pressure Injection Auxiliary spray method

**INITIAL CONDITION:**

Initiate a large break LOCA (IMF HH44 1.0, IS page RCS3)

**ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:**

Complete DB-OP-02000 section 10 steps up to establishing long term boron dilution

**MALFUNCTION/FAILURE TO INSERT:**

DH12 Failure to open  
IMF BD12A  
IC74

**ACTION/CUES:**

If called, **ROLE PLAY** as the Zone 3 EO to report that breakers BE1183 (on E11B) and BF1130 (on F11A) have been closed for DH 11 and DH 12.

**EXAMINER COPY****INITIAL CONDITIONS:**

A large break LOCA has occurred

Adequate SCM does NOT exist

Both MU pumps and both HPI Pumps have been stopped in accordance with section 10 of DB-OP-02000

LPI Pumps 1 and 2 have been transferred to the Emergency Sump

The Zone 3 EO has performed actions for closing the breakers for DH 11 and DH 12.

**INITIATING CUES:**

The Unit Supervisor directs you to establish long term boron dilution using Attachment 12 of DB-OP-02000

**(Provide the examinee a copy of Attachment 12 of DB-OP-02000 (step 1 signed off))**

**CANDIDATE COPY****INITIAL CONDITIONS:**

A large break LOCA has occurred

Adequate SCM does NOT exist

Both MU pumps and both HPI Pumps have been stopped in accordance with section 10 of DB-OP-02000

LPI Pumps 1 and 2 have been transferred to the Emergency Sump

The Zone 3 EO has performed actions for closing the breakers for DH 11 and DH 12.

**INITIATING CUES:**

The Unit Supervisor directs you to establish long term boron dilution using Attachment 12 of DB-OP-02000

**PERFORMANCE INFORMATION**

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

START TIME: _____
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1. PERFORMANCE STEP: Check that SCM does not exist ( Attachment 12 Step 1)

STANDARD: Verify Attachment 12, Step 1 signed off

CUE: **If necessary, "SCM does NOT exist"**

\_\_\_\_\_  
SAT UNSAT

2. PERFORMANCE STEP: Check Incore temperatures are < 333°F (Step 2)

STANDARD: Rotate Incore temperature selector switches HS 4627 and HS 4628 to verify the Incore Temperature indicators, TI 4627 and TI 4628 are < 333°F or use SPDS

CUE: **None**

\_\_\_\_\_  
SAT UNSAT

3. PERFORMANCE STEP: Check ECCS Pump suction have been transferred to the Emergency Sump (Step 3)

STANDARD: Verify the RED lights are lit on HIS DH9B and HIS DH9A  
Verify the GREEN lights are lit on HIS DH7B and HIS DH7A

NOTE: May sign off as complete based on initial cue.

CUE: **None**

\_\_\_\_\_  
SAT UNSAT

4. PERFORMANCE STEP: Determine step 4 to not be applicable and step 5 to be complete

STANDARD: Mark step 4 N/A (not applicable)  
Sign off step 5 as complete based on initial cue

CUE: **If, necessary, "The Zone 3 EO reports that breakers BE1183 and BF1130 have been closed for DH 11 and DH 12"**

\_\_\_\_\_  
SAT UNSAT

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5. PERFORMANCE STEP: Return control power to DH 11 and DH 12 (Step 6. A.)

STANDARD: Depress the ON pushbutton on HIS DH11A and HIS DH12A

CUE: **None**

SAT UNSAT

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6. PERFORMANCE STEP: Open DH 11, Normal Suction Isolation (Step 6. B.)

STANDARD: Depress the OPEN pushbutton on HIS DH11. Verify RED light comes on and GREEN light goes off

CUE: **None**

SAT UNSAT

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7. PERFORMANCE STEP: Recognize DH 12, Normal Suction Isolation does not open (Step 6. C.)

STANDARD: Depress the OPEN pushbutton on HIS DH12, observes GREEN light stays on

CUE: **If necessary, role play as Equipment Operator or Maintenance to investigate and report "problem appears to be at the valve"**

SAT UNSAT

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**ALTERNATE PATH STARTS HERE: Recognize normal method not successful and route to alternate method**

8. PERFORMANCE STEP: Recognize Normal Method is not successful

STANDARD:

- Refer to Step 4 or 11
- Notify the Technical Support Center that the Normal Method is unavailable
- Proceed with Alternate Method

CUE: **If asked, "Establish long term boron dilution IAW Attachment 12"**

CUE: **The Unit Supervisor has notified the Technical Support Center to report dilution flow via DH 11 and DH 12 has not been established**

SAT UNSAT

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9. PERFORMANCE STEP: Verify both HPI pumps are stopped (Alt Method Step 1)

STANDARD: Verify GREEN light is lit on both HPI Pumps

COMMENT: May sign off based on initial cue

CUE: **None**

SAT UNSAT

10. PERFORMANCE STEP: Verify that the suction of the LPI Pumps and the CTMT Spray pumps have been transferred to the Emergency Sump (Alt Method Step 2)

STANDARD: Verify the RED lights are lit on HIS DH9B and HIS DH9A  
Verify the GREEN lights are lit on HIS DH7B and HIS DH7A

CUE: **None**

SAT UNSAT

11. PERFORMANCE STEP: Verify LPI Pump 2 is in service (Alt Method Step 3)

STANDARD: Verify RED light is lit on LPI Pump 2

CUE: **None**

SAT UNSAT

12. PERFORMANCE STEP: Verify HPI Pump 2 is available (Alt Method Step 4)

STANDARD: Verify GREEN light is lit on HPI Pump 2

CUE: **(If asked) HPI Pump 2 is available**

SAT UNSAT

13. PERFORMANCE STEP: PERFORMANCE STEP: Check that SCM does NOT exist (Alt Method Step 5)

STANDARD: Determine that SCM is < 20°F (SCM meters off due to plant conditions)

CUE: **If necessary, "SCM does NOT exist"**

SAT UNSAT

14. PERFORMANCE STEP: Check incore temperatures are < 333°F (Alt Method Step 6)

STANDARD: Rotate Incore temperature selector switches HS 4627 and HS 4628 to verify the Incore Temperature indicators, TI 4627 and TI 4628 are < 333°F or use SPDS

CUE: **None**

SAT UNSAT

15. PERFORMANCE STEP: Check ECCS Pump suctions have been transferred to the Emergency Sump (Alt Method Step 7)

STANDARD: Verify the RED lights are lit on HIS DH9B and HIS DH9A  
Verify the GREEN lights are lit on HIS DH7B and HIS DH7A

CUE: **None**

SAT UNSAT

**NOTE: Steps 16, 17, 18, and 19 are bulleted steps, they can be done in any order**

16. PERFORMANCE STEP: Verify RC 10, Spray Block Valve is closed (Alt Method Step 8)  
.....**C**.....

STANDARD: Depress the CLOSE pushbutton on HIS RC 10, Verify the GREEN light comes on and the RED light goes off

CUE: **None**

SAT UNSAT

17. PERFORMANCE STEP: Verify HP2A, HP INJ 2 Valve is closed (Alt Method Step 8)  
.....**C**.....

STANDARD: Depress the CLOSE pushbutton on HIS HP 2A, Verify the GREEN light comes on and the RED light goes off

CUE: **None**

SAT UNSAT

18. PERFORMANCE STEP: Verify HP2B, HP INJ 2 Valve is closed (Alt Method Step 8)  
.....**C**.....

STANDARD: Depress the CLOSE pushbutton on HIS HP 2B, Verify the GREEN light comes on and the RED light goes off

CUE: **None**

SAT UNSAT

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19. PERFORMANCE STEP: Verify HP31, HPI Pump 2 Min Recirc Iso is closed  
(Alt Method Step 8)

.....**C**.....

STANDARD: Depress the CLOSE pushbutton on HIS HP 31, Verify the GREEN light comes on and the RED light goes off

CUE: **None**

SAT UNSAT

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**NOTE: Steps 20, 21, and 22 are bulleted steps, they can be done in any order**

20. PERFORMANCE STEP: Open DH 63, LPI to HPI Piggyback (Alt Method Step 9)

.....**C**.....

STANDARD: Depress the OPEN pushbutton on HIS DH 63, verify the RED light comes on and the GREEN light goes off

CUE: **None**

SAT UNSAT

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21. PERFORMANCE STEP: Open DH 2736, DH Aux Spray (Alt Method Step 9)

.....**C**.....

STANDARD: Depress the OPEN pushbutton on HIS DH 2736, verify the RED light comes on and the GREEN light goes off

CUE: **None**

SAT UNSAT

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22. PERFORMANCE STEP: Open DH 2735, DH Aux Spray (Alt Method Step 9)

.....**C**.....

STANDARD: Depress the OPEN pushbutton on HIS DH 2735, verify the RED light comes on and the GREEN light goes off

CUE: **None**

SAT UNSAT

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23. PERFORMANCE STEP: Start HPI Pump 2 (Alt Method Step 10)

.....**C**.....

STANDARD: Rotate HIS 1523 to START, verify amps rise, RED light comes on, and GREEN light goes off

CUE: **None**

SAT UNSAT

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24. PERFORMANCE STEP: Check Pressurizer Spray flow is greater than 265 GPM  
(Alt Method Step 11)

STANDARD: Visual check of FI 4999, Aux Pressurizer Spray Flow

CUE: **None**

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SAT UNSAT

TERMINATING CUES: This JPM is complete (Terminated by the evaluator)

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END TIME

# **Simulator JPM S2**

**Facility:** Davis-Besse **Task No:** 061-017-04-0100

**Task Title:** Initiate and Isolate SFRCS and perform actions for an AFW Pump Trip

**K/A Reference:** (061) A2.04 3.4/3.8 **Job Performance Measure No:** S2 (New)

**Examinee:** \_\_\_\_\_

**NRC Examiner:** \_\_\_\_\_ **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 conditions are specified in the Initial Conditions and Initiating Cues

**Task Standard:**

Initiate and Isolate SFRCS, place MDFP in service, supply water to SG 2 to maintain required level (49 inches)

**Required Materials:**

The following Operating Aids are located at the CTRM AFW Panel

- DB-OP-02000 Specific Rule 4
- DB-OP-02000 Attachment 5
- DB-OP-02000 Table 1

**General References:**

DB-OP-02000  
DB-OP-02525 R13 Steam Leaks

**Initiating Cue:**

The Initiating Cues are specified in the Examiner/Student Copy Performance Measure pages.

**Time Critical Task:** No

**Alternate Path:** Yes

**Validation Time:** 8 minutes

**SIMULATOR INSTRUCTIONS****TASK DESCRIPTION:**

Perform actions for an AFW Pump Trip- Initiate and Isolate SFRCS, place MDFP in service, supply water to SG 2 to maintain required level

IC320

**INITIAL CONDITION:**

Reactor Tripped, supplemental actions in progress

**ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:**

Verify plant stable to minimize unrelated annunciators

**MALFUNCTIONS/FAILURE TO INSERT:**

Trip AFP 2 two minutes after I&I

**ACTION/CUES:**

None

**EXAMINER COPY****INITIAL CONDITIONS:**

The Reactor inadvertently tripped during CRDM Trip Breaker Testing

DB-OP-02000 Immediate Actions are complete and Supplemental Actions are in progress

A report of a major Steam Leak in the Turbine Building, was just received by the Control Room

**INITIATING CUES:**

You are the BOP operator

You have been directed by the Command SRO to Initiate AND Isolate SFRCS using the MANUAL ACTUATION Switches

***(NOTE: Operating Aids stationed at the AFW Panel will be utilized by the Candidate)***

**CANDIDATE COPY****INITIAL CONDITIONS:**

The Reactor inadvertently tripped during CRDM Trip Breaker Testing

DB-OP-02000 Immediate Actions are complete and Supplemental Actions are in progress

A report of a major Steam Leak in the Turbine Building, was just received by the Control Room

**INITIATING CUES:**

You are the BOP operator

You have been directed by the Command SRO to Initiate AND Isolate SFRCS using the MANUAL ACTUATION Switches

**PERFORMANCE INFORMATION**

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

START TIME: _____
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1. PERFORMANCE STEP: Initiate AND Isolate SFRCS using SFRCS MANUAL ACTUATION  
.....**C**..... switches

STANDARD: Depresses both SFRCS MANUAL ACTUATION Switches

CUE: **None**

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SAT UNSAT

2. PERFORMANCE STEP: Verify proper SFRCS actuation

STANDARD: - Verify proper valve line-up, may refer to Table 1  
 - Verifies proper operation of the AFW Pumps  
 - Verifies proper SG Levels and Pressures  
 - Dispatches an EO to the AFPs to verify proper operation

CUE: **None**

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SAT UNSAT

**Alternate Path starts here. #2 AFP trips 45 seconds after Initiation and Isolation**

3. PERFORMANCE STEP: Crew Updates 10-2-H, "AFPT 2 OVRSPD TRIP"

STANDARD: Implements Specific Rule 4, Steam Generator Control and routes to Attachment 5, Guidelines for Restoring Feedwater.

NOTE: Operator aids located at the AFW Panel will be used to perform the remaining steps

CUE: **IF asked, role play as the Command SRO, carry out actions IAW Specific Rule 4**

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SAT UNSAT

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4. PERFORMANCE STEP: Verify D2 is energized

STANDARD: Checks voltage on D2 or uses alternate indications

CUE: **None**

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SAT UNSAT

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5. PERFORMANCE STEP: Enable BOTH MDFP Discharge Valves

STANDARD: Depress the ON pushbuttons

- HIS 6459
- HIS 6460

CUE: **None**

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SAT UNSAT

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6. PERFORMANCE STEP: Close BOTH MDFP Discharge Valves

STANDARD: Verify zero demand

- LIC6459
- LIC6460

CUE: **None**

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SAT UNSAT

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7. PERFORMANCE STEP: Start the MDFP

.....**C**.....

STANDARD: Rotate HS 579 clockwise, observe Red light LIT and amps

CUE: **None**

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SAT UNSAT

8. PERFORMANCE STEP: Establish flow to the Steam Generator 2 at < 1000 gpm total flow  
.....**C**.....

STANDARD: Uses the increase pushbutton on LIC 6460 to raise feedwater flow while  
maintaining total feedwater flow to < 1000 gpm on FI 5876 and maintain  
proper SG 2 level (49 inches)

NOTE: May also place AF6460 in AUTO

CUE: **None**

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SAT UNSAT

TERMINATING CUES: This JPM is complete. (Terminated by the evaluator)

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END TIME

VERIFY SIMULATOR OPERATOR AIDS ARE CLEANED AFTER JPM IS COMPLETE

# **Simulator JPM S3**

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**Facility:** Davis-Besse **Task No.:** 012-007-01-0100**Task Title:** Place all four RPS Channels in Shutdown Bypass**K/A Reference:** 012 A4.03 (3.6/3.6) **Job Performance Measure No.:** S3 (OPSJPM021)**Examinee:** \_\_\_\_\_**NRC Examiner:** \_\_\_\_\_ **Date:** \_\_\_\_\_**Method of testing:**Simulated Performance \_\_\_\_ Actual Performance XClassroom \_\_\_\_ 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 conditions are specified in the Initial Conditions and Initiating Cues.

**Task Standard:**

Place all 4 RPS Channels in Shutdown Bypass

**Required Materials:**

DB-OP-06403, RPS and NI Operating Procedure Section 3.3

**General References:**

None

**Initiating Cue:**

The plant conditions are specified in the Initial Conditions and Initiating Cues.

**Time Critical Task:**

No

**Alternate Path:**

No

**Validation Time:**

17 minutes

**SIMULATOR INSTRUCTIONS**

**TASK DESCRIPTION:**

RPS Shutdown Bypass Operation

**INITIAL CONDITION:**

Mode 5  
IC55

**ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:**

None

**MALFUNCTIONS/FAILURE TO INSERT:**

None

**ACTION/CUES:**

Sign off steps 3.3.1 and 3.3.6, 3.3.2-3.3.5 are marked N/A

**EXAMINER COPY****INITIAL CONDITIONS:**

The plant is in Mode 5

Control Rod Drive (CRD) testing is scheduled for next shift

**INITIATING CUES:**

You are the Spare Reactor Operator

The Unit Supervisor directs you to place all four RPS Channels in Shutdown Bypass in accordance with Section 3.3 of DB-OP-06403, RPS and NI Operating Procedure to allow the CRD Breakers to be closed to support scheduled CRD testing

All Section 3.3 prerequisites have been completed

**(Provide the candidate a copy of Section 3.3 of DB-OP-06403)**

**(When required, “Another Reactor Operator will respond to that annunciator.”)**

**CANDIDATE COPY****INITIAL CONDITIONS:**

The plant is in Mode 5

Control Rod Drive (CRD) testing is scheduled for next shift

**INITIATING CUES:**

You are the Spare Reactor Operator

The Unit Supervisor directs you to place all four RPS Channels in Shutdown Bypass in accordance with Section 3.3 of DB-OP-06403, RPS and NI Operating Procedure to allow the CRD Breakers to be closed to support scheduled CRD testing

All Section 3.3 prerequisites have been completed

**PERFORMANCE INFORMATION**

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

START TIME: _____
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1. PERFORMANCE STEP: Obtain keys to RPS cabinet doors and RPS S/D bypass keys

STANDARD: Obtain the correct keys

CAUTION: Do NOT allow the candidate to write in the key log (exam security OE)

NOTE: RPS Cabinets in the Simulator are NOT Electrical Hazards. RPS Cabinets in the Plant do require electrical safety precautions. The candidate should take electrical safety precautions as if they were in the plant.

CUE: **None**

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SAT UNSAT

2. PERFORMANCE STEP: Place RPS Channels in shutdown bypass (Step 3.3.7)  
.....**C**.....

STANDARD: Place the key operated bypass switch on the SHUTDOWN BY-PASS Key Switch module in BYPASS for each of the RPS Channels

CH1 \_\_\_\_\_ CH2 \_\_\_\_\_ CH3 \_\_\_\_\_ CH4 \_\_\_\_\_

CUE: **None**

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SAT UNSAT

3. PERFORMANCE STEP: Place RPS Channels in shutdown bypass (Step 3.3.7)

STANDARD: Check the top three lights on the Shutdown Bypass AUXILIARY RELAY modules are BRIGHT

CH1 \_\_\_\_\_ CH2 \_\_\_\_\_ CH3 \_\_\_\_\_ CH4 \_\_\_\_\_

CUE: **None**

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SAT UNSAT

4. PERFORMANCE STEP: Reset the SHUTDOWN BY-PASS HIGH PRESS TRIP BISTABLE  
.....**C**..... (Step 3.3.8)

STANDARD: Momentarily depress the OUTPUT STATE and OUTPUT MEMORY RESET SWITCHES in each RPS channel

COMMENTS: Only OUTPUT STATE reset is critical. Step 2 must be completed prior to this step.

CH1 \_\_\_\_\_ CH2 \_\_\_\_\_ CH3 \_\_\_\_\_ CH4 \_\_\_\_\_

CUE: **None**

SAT UNSAT

5. PERFORMANCE STEP: Reset the SHUTDOWN BY-PASS HIGH PRESS TRIP BISTABLE  
(Step 3.3.8)

STANDARD: Check the status lights are DIM on the SHUTDOWN BYPASS HIGH PRESSURE TRIP BISTABLE

CH1 \_\_\_\_\_ CH2 \_\_\_\_\_ CH3 \_\_\_\_\_ CH4 \_\_\_\_\_

CUE: **None**

SAT UNSAT

6. PERFORMANCE STEP: Reset Rx trip module (Step 3.3.9)  
.....**C**.....

STANDARD: Depress and release the RESET SWITCH on the REACTOR TRIP module  
OR  
Rotate the MANUAL BYPASS Key Switch to actuate the Manual Bypass Relay, AND then return the key switch to the non-bypass position

COMMENTS: Either method is acceptable. Step 4 must be completed prior to this step

CH1 \_\_\_\_\_ CH2 \_\_\_\_\_ CH3 \_\_\_\_\_ CH4 \_\_\_\_\_

CUE: **If asked, use the RESET SWITCH on the REACTOR TRIP module**

SAT UNSAT

7. PERFORMANCE STEP: Verify the channel PROTECTIVE SUBSYSTEM light at the top of each RPS cabinet is dim (Step 3.3.10)

STANDARD: Visual observation of PROTECTIVE SUBSYSTEM light status on panel and top of cabinet

CH1 \_\_\_\_\_ CH2 \_\_\_\_\_ CH3 \_\_\_\_\_ CH4 \_\_\_\_\_

CUE: **None**

\_\_\_\_\_  
SAT UNSAT

8. PERFORMANCE STEP: Lock the doors and return keys

STANDARD: Doors locked, and keys returned

NOTE: There is NOT a step in the procedure to lock the doors. Doors are normally kept locked. This step also ensures the keys are returned to the key cabinet.

CUE: **Reactor trip breakers will be reset by another operator (Step 3.3.11)**

\_\_\_\_\_  
SAT UNSAT

TERMINATING CUES: This JPM is complete (terminated by the evaluator)

\_\_\_\_\_  
END TIME

**SYSTEM STATUS FILE COVER SHEET**

DB-0065-4

WORKING COPY		<p>_____</p> <p>DATE</p> <p>_____</p> <p>DB-OP-06403</p> <p>PROCEDURE NUMBER</p> <p>_____</p> <p>3.3</p> <p>SUBSECTION / ATTACHMENT</p>
VERIFIED CURRENT		
Initial/Date	Initial/Date	
SRO/Today		

<p><b><u>REASON FOR PERFORMING:</u></b></p> <p>Place RPS in Shutdown Bypass</p>

- Have the Control Room drawings been updated as applicable?
- Has this evolution been logged in the Unit Log?
- Are all N/A's used in this procedure acceptable as delineated in admin procedures for using N/A?
- Are applicable Subsections signed and dated?
- Are all valve and breaker lineup spaces filled in or otherwise documented?

Review Completed By: \_\_\_\_\_ Date: \_\_\_\_\_

3.3 Placing the RPS in Shutdown Bypass

Prerequisites

SRO

3.3.1 IF the CRD breakers are open with the CRD System incapable of rod withdrawal, YES  
THEN prerequisite Steps 3.3.2 thru 3.3.5 may be N/A'd.

3.3.2 Verify I&C has set the Over Power Trip bistable for each RPS Channel to equal to or less than 4.5 percent RTP. REFER TO DB-MI-03017 (03018, 03019, 03020), RPS Channel 1 (2, 3, 4) Power/Imbalance/Flow Trip Setpoint Verification and Overpower Trip Setpoint Adjustment/Verification.

N/A

- Channel 1
- Channel 2
- Channel 3
- Channel 4

3.3.3 Verify the Channel Functional test for the associated RPS Channel is current, Refer to DB-MI-03001 (03002, 03003, 03004) Channel Functional Test of Reactor Protective System Channel 1 (2, 3, 4) Reactor Coolant Pressure and Temperature Trip Functions.

- Channel 1
- Channel 2
- Channel 3
- Channel 4

3.3.4 Verify the Channel Calibration of RCS Pressure and Temperature for the associated RPS Channel is current, refer to the following:

- DB-MI-03051, Channel Calibration of 58A-ISP/TRC02B2/3B2 Reactor Coolant System Pressure and Temperature to RPS Channel 1 and Pressurizer Power Relief Valve
- DB-MI-03052 Channel Calibration of 58A-ISP/TRC02A2/3A4 Reactor Coolant System Pressure and Temperature to RPS Channel 2 and Pressurizer Power Relief Valve
- DB-MI-03053 Channel Calibration of 58A-ISP/TRC02B1/3B4 Reactor Coolant System Pressure and Temperature to RPS Channel 3
- DB-MI-03054 Channel Calibration of 58A-ISP/TRC02A1/3A2 Reactor Coolant System Pressure and Temperature to RPS Channel 4

N/A

3.3.5 Verify the Channel Calibration of Overpower, Power/Imbalance/Flow, and Power/Pumps for the associated RPS Channel is current, Refer to DB-MI-03057 (03058, 03059, 03060) RPS Channel 1 (2, 3, 4) Calibration of Overpower, Power/Imbalance/Flow, and Power/Pumps Trip Functions.

- N/A • Channel 1
- \_\_\_\_\_ • Channel 2
- \_\_\_\_\_ • Channel 3
- N/A • Channel 4

SRO ~~3.3.6~~ Verify DB-OP-03006, Miscellaneous Instrument Shift Checks, channel check requirements for having RPS in Shutdown Bypass with any Trip Breaker closed, and system capable of Rod Withdrawal have been completed.

Prerequisites completed by *Kevin L. G... ..* Date *Today*

Procedure

3.3.7 Place the key operated bypass switch on the SHUTDOWN BY-PASS Key Switch module in BYPASS for each of the RPS Channels, AND check the top three lights on the Shutdown Bypass AUXILIARY RELAY module are BRIGHT.

- \_\_\_\_\_ • Channel 1
- \_\_\_\_\_ • Channel 2
- \_\_\_\_\_ • Channel 3
- \_\_\_\_\_ • Channel 4

3.3.8 Reset the SHUTDOWN BY-PASS HIGH PRESS TRIP BISTABLE in each RPS Channel by momentarily depressing the OUTPUT STATE and OUTPUT MEMORY RESET SWITCHES, AND check the status lights are DIM.

- \_\_\_\_\_ • Channel 1
- \_\_\_\_\_ • Channel 2
- \_\_\_\_\_ • Channel 3
- \_\_\_\_\_ • Channel 4

3.3.9 Depress and release the RESET SWITCH on the REACTOR TRIP module

OR,

Rotate the MANUAL BYPASS Key Switch to actuate the Manual Bypass Relay,

AND then return the key switch to the non-bypass position.

- \_\_\_\_\_ • Channel 1
- \_\_\_\_\_ • Channel 2
- \_\_\_\_\_ • Channel 3
- \_\_\_\_\_ • Channel 4

3.3.10 Check the following PROTECTIVE SUB-SYSTEM lights on the indicating panel are DIM:

- \_\_\_\_\_ • Channel 1
- \_\_\_\_\_ • Channel 2
- \_\_\_\_\_ • Channel 3
- \_\_\_\_\_ • Channel 4

\_\_\_\_\_ 3.3.11 IF the Reactor Trip Breakers and CRD electronic trip devices are to be reset, THEN REFER TO DB-OP-06402, CRD Operating Procedure.

Subsection 3.3 completed by \_\_\_\_\_ Date \_\_\_\_\_