Admin JPM
SRO-A1.1

Facility: Davis-Besse **Task No:** 012-012-02-0100

Task Title: Review DB-NE-03230, RPS Daily Heat Balance Check

K/A Reference: 2.1.23 (4.4) **Job Performance Measure No**: SRO-A1.1 (NEW)

Examinee: _____

NRC Examiner: _____ **Date:** _____

Method of testing:

Simulated Performance ___ Actual Performance _X_

Classroom _X_ Simulator ___ 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:
Find errors and complete review of DB-NE-03230, RPS Daily Heat Balance Check

Required Materials:
DB-NE-03230
DB-PF-06703, Miscellaneous Operation Curves CC6.9, CC6.9a, CC6.9b, CC8.1 and CC9.2
Computer Summary Group 12, Heat Balance Points
Group 38 printout
Calculator

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:
19 minutes

EXAMINER COPY

INITIAL CONDITIONS:

Return to 100% power following refueling outage is in progress.

Reactor Power is currently being held at approximately 95%.

Reactor power has been constant (±1%) for 30 minutes.

INITIATION CUE:

DB-NE-03230, RPS Daily Heat Balance Check was completed to verify calibration of the Nuclear Instruments.

As the Unit Supervisor, review DB-NE-03230, RPS Daily Heat Balance Check

Completion of Test Cover Sheet is not required for this JPM.

Use the values from the Plant Process Computer Summary Group 12 and Group 38 printout provided.

Identify any discrepancies below.

(Provide surveillance test DB-NE-03230, Computer Summary Group 12, Group 38 printout, and DB-PF-06703, Miscellaneous Operation Curves CC6.9, CC6.9a, CC6.9b, CC8.1 and CC9.2)

CANDIDATE COPY

INITIAL CONDITIONS:

Return to 100% power following refueling outage is in progress.

Reactor Power is currently being held at approximately 95%.

Reactor power has been constant (±1%) for 30 minutes.

INITIATION CUE:

DB-NE-03230, RPS Daily Heat Balance Check was completed to verify calibration of the Nuclear Instruments.

As the Unit Supervisor, review DB-NE-03230, RPS Daily Heat Balance Check

Completion of Test Cover Sheet is not required for this JPM.

Use the values from the Plant Process Computer Summary Group 12 and Group 38 printout provided.

Identify any discrepancies below.

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 unless denoted in the "Comments".

START TIME: _____

1. PERFORMANCE STEP: Verify reactor power is constant ±1% for 15 minutes (Step 3.1).

   STANDARD: Checks Prerequisites are complete based on initial conditions provided.

   CUE: **None**

   _____
   SAT UNSAT

2. PERFORMANCE STEP: Record HBP and NI power in table provided (Step 4.1)
   .....C.....

   STANDARD: Recognize Step 4.1 was performed incorrectly
   95.48% was entered vice 93.48% for R814 (NI8) in provided table

   COMMENT: Step 4.2 is N/A

   CUE: **None**

   _____
   SAT UNSAT

3. PERFORMANCE STEP: Determine recalibration upper limit (Step 4.3.1)

   STANDARD: Using curve CC6.9 or CC6.9B determine recalibration upper limit to be 98%
   (acceptable 97.9 – 98.1) and record data

   CUE: **None**

   _____
   SAT UNSAT

4. PERFORMANCE STEP: Determine recalibration lower limit (Step 4.3.2).

   STANDARD: Determine recalibration lower limit to be 93.49
   (94.99 – 1.5 = 93.49)

   CUE: **None**

   _____
   SAT UNSAT

5. PERFORMANCE STEP: Determine NI required recalibration limit (Step 4.3.3).

   STANDARD: Determine NI required recalibration limit to be 92.99 (94.99 – 2 = 92.99)

   CUE: **None**

SAT UNSAT

6. PERFORMANCE STEP: Notify Shift Manager if any NI value recorded in table is above the upper recalibration limit or below the lower recommended recalibration limit (Step 4.4). **.....C.....**

   STANDARD: Recognize Step 4.4 should not be N/A'd. The wrong value was entered for R814 (NI8) in step 4.1 table.

   COMMENT: Steps 4.5 and 4.6 are N/A

   CUE: **None**

SAT UNSAT

7. PERFORMANCE STEP: Record Feedwater values in table provided (Step 4.7.1).

   STANDARD: Using data provided on Summary Group 12 record values for H180 (LEFM), F084 (5686), F085 (5686), F086 (5475) and F087 (5475) record data in table provided

   CUE: **None**

SAT UNSAT

8. PERFORMANCE STEP: Calculate total indicated feedwater flow (Step 4.7.2).

   STANDARD: Add the 4 flow values and divide by 2000 to determine total indicated feedwater flow value to be 11.161 and record value (22322 / 2000 = 11.161) (acceptable 11.16 – 11.2)

   CUE: **None**

SAT UNSAT

9. PERFORMANCE STEP: Determine Total Feedwater Flow expected (Step 4.7.3).
.....C.....

STANDARD: Recognize step 4.7.3 was performed incorrectly

Using curve CC8.1 and HBP recorded in step 4.1 (94.99) Total Feedwater Flow expected should be 11.3 MPPH (acceptable 11.2 – 11.4)

CUE: **None**

SAT UNSAT

10. PERFORMANCE STEP: Determine minimum flow and maximum flow expected
.....C..... (Step 4.7.4).

STANDARD: Recognize step 4.7.4 is incorrect

Using the correct value for step 4.7.3 (11.3 MPPH) multiply by .97 for minimum flow expected and multiply by 1.03 for maximum flow expected

minimum flow expected = 10.961 (acceptable 10.864 – 11.058)
maximum flow expected = 11.639 (acceptable 11.536 – 11.742)

CUE: **None**

SAT UNSAT

11. PERFORMANCE STEP: Verify indicated Feedwater Flow is between minimum and maximum expected values (Step 4.7.5).

STANDARD: Verify indicated Feedwater Flow from step 4.7.2 is between the minimum and maximum expected values from step 4.7.4

COMMENT: Step 4.7.6 is N/A

CUE: **None**

SAT UNSAT

12. PERFORMANCE STEP: Record value for computer point J427 (Gen Gross PWR) (Step 4.8.1).

STANDARD: Using data provided on Summary Group 12 record the value of computer point J427 as 902.26 MWe

CUE: **None**

SAT UNSAT

13. PERFORMANCE STEP: Record Gross Generated Megawatts corresponding to the HBP (Step 4.8.2).

    STANDARD: Using curve CC9.2 and the HBP recorded in step 4.1 determine the Gross Generated Megawatts corresponding to the HBP to be 900 MWe (acceptable 890 to 910 MWe)

    CUE: **None**

SAT UNSAT

14. PERFORMANCE STEP: Determine minimum and maximum expected Generated MWe (Step 4.8.3).

    STANDARD: Calculate minimum and maximum expected Generated MWe to be 870 MWe and 930 MWe.
    (acceptable is calculation of ± 30 applied to value determined in previous performance step)

    CUE: **None**

SAT UNSAT

15. PERFORMANCE STEP: Verify indicated Gross Generated Megawatts is within the minimum and maximum expected values (Step 4.8.4).

    STANDARD: Determine indicated Gross Generated Megawatts from step 4.8.1 is between the minimum and maximum expected values determined in step 4.8.3

    COMMENT: Step 4.8.5 is N/A

    CUE: **None**

SAT UNSAT

16. PERFORMANCE STEP: Complete section 4.0

    STANDARD: Check Completed by line is signed.

    CUE: **None**

SAT UNSAT

17. PERFORMANCE STEP: Sign applicable acceptance criteria
.....C.....

STANDARD: Recognize acceptance criteria was not signed

CUE: **None**

_____
SAT UNSAT

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

END TIME_____

Admin JPM
SRO-A1.2

Facility: Davis-Besse **Task No:** 336-004-03-0300

Task Title: Determine Maintenance of Active License Status

K/A Reference: 2.1.4 (3.8) **Job Performance Measure No**: SRO-A1.2 (JPM 295)

Examinee: _____

NRC Examiner: _____ **Date:** _____

Method of testing:

Simulated Performance ___ Actual Performance _X_

Classroom _X_ Simulator ___ 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:
Determine SRO 1 and SRO 3 are Inactive. Determine SRO 2 and SRO 4 are Active.

Required Materials:
DBBP-TRAN-0014, License Requirements for Licensed Individuals
NT-OT-07001, Training and Qualification of Operations Personnel

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:
15 minutes

EXAMINER COPY

INITIAL CONDITIONS:

It is **7/1/19**. Four Senior Reactor Operators have the following work history for the second quarter of 2019 (Plant was in Mode 1 the entire quarter):

SRO 1	Entered second quarter with active license	
	4/01/2019	Worked 0700-1900 as Command SRO
	4/02/2019	Worked 0700-1900 as Command SRO
	4/03/2019	Worked 0700-1900 as Command SRO
	4/07/2019	Worked 0700-1900 as Command SRO. Was relieved for 5 hours to obtain required biennial License Physical at the Health Center
	4/08/2019	Worked 0700-1900 as Command SRO
SRO 2	Entered second quarter with inactive license	
	Completed all requirements for license reactivation 4/15/19 through 4/20/19	
	4/23/19	Worked 0700-1900 as Command SRO
	4/24/19	Worked 0700-1900 as Command SRO
	4/28/19	Worked 0700-1900 as Shift Technical Advisor
SRO 3	Entered second quarter with active license	
	4/10/19	Worked 0700-1900 as Shift Manager
	4/11/19	Worked 0700-1900 as Shift Manager
	4/18/19	Worked 0700-1900 as Shift Manager
	4/19/19	Worked 0700-1900 as Shift Technical Advisor
	4/20/19	Worked 0700-1900 as Shift Manager
SRO 4	License issued at the beginning of the second quarter	
	5/1/19	Worked 0700-1900 as Command SRO
	5/2/19	Worked 0700-1900 as Command SRO
	5/3/19	Worked 0700-1900 as Command SRO
	5/9/19	Worked 0700-1900 as Command SRO
	5/10/19	Worked 0700-1900 as Shift Technical Advisor

INITIATION CUE:

Based on the previous quarters work history determine the license status as of today, **7/1/19**, for each Senior Reactor Operator and document as ACTIVE or INACTIVE on this page.

(Provide copy of DBBP-TRAN-0014, License Requirements for Licensed Individuals and NT-OT-07001, Training and Qualification of Operations Personnel)

CANDIDATE COPY

INITIAL CONDITIONS:

It is **7/1/19**. Four Senior Reactor Operators have the following work history for the second quarter of 2019 (Plant was in Mode 1 the entire quarter):

SRO 1	Entered second quarter with active license	
	4/01/2019	Worked 0700-1900 as Command SRO
	4/02/2019	Worked 0700-1900 as Command SRO
	4/03/2019	Worked 0700-1900 as Command SRO
	4/07/2019	Worked 0700-1900 as Command SRO. Was relieved for 5 hours to obtain required biennial License Physical at the Health Center
	4/08/2019	Worked 0700-1900 as Command SRO
SRO 2	Entered second quarter with inactive license	
	Completed all requirements for license reactivation 4/15/19 through 4/20/19	
	4/23/19	Worked 0700-1900 as Command SRO
	4/24/19	Worked 0700-1900 as Command SRO
	4/28/19	Worked 0700-1900 as Shift Technical Advisor
SRO 3	Entered second quarter with active license	
	4/10/19	Worked 0700-1900 as Shift Manager
	4/11/19	Worked 0700-1900 as Shift Manager
	4/18/19	Worked 0700-1900 as Shift Manager
	4/19/19	Worked 0700-1900 as Shift Technical Advisor
	4/20/19	Worked 0700-1900 as Shift Manager
SRO 4	License issued at the beginning of the second quarter	
	5/1/19	Worked 0700-1900 as Command SRO
	5/2/19	Worked 0700-1900 as Command SRO
	5/3/19	Worked 0700-1900 as Command SRO
	5/9/19	Worked 0700-1900 as Command SRO
	5/10/19	Worked 0700-1900 as Shift Technical Advisor

INITIATION CUE:

Based on the previous quarters work history determine the license status as of today, **7/1/19**, for each Senior Reactor Operator and document as ACTIVE or INACTIVE on this page.

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 unless denoted in the "Comments".

START TIME: _____

1. PERFORMANCE STEP: Evaluate SRO 1 work history
   .....C.....

   STANDARD: Reviews DBBP-TRAN-0014, License Requirements for Licensed Individuals and determines license is Inactive.

   COMMENT: Credit not received for complete watch due to absence to Health Center

   CUE: **None**

   _____
   SAT UNSAT

2. PERFORMANCE STEP: Evaluate SRO 2 work History
   .....C.....

   STANDARD: Reviews DBBP-TRAN-0014, License Requirements for Licensed Individuals and determines license is Active

   COMMENT: Reactivation meets proficiency requirements for the quarter

   CUE: **None**

   _____
   SAT UNSAT

3. PERFORMANCE STEP: Evaluate SRO 3 work history
   .....C.....

   STANDARD: Reviews DBBP-TRAN-0014, License Requirements for Licensed Individuals and determines license is Inactive

   COMMENT: No credit given for Shift Technical position

   CUE: **None**

   _____
   SAT UNSAT

4. PERFORMANCE STEP: Evaluate SRO 4 work history
.....C.....

STANDARD: Reviews DBBP-TRAN-0014, License Requirements and NT-OT-01007**,** Training and Qualification of Operations Personnel for Licensed Individuals and determines license is Active.

COMMENT: A newly issued license meets the proficiency requirement for the quarter in which it was issued

CUE: **None**

_____
SAT UNSAT

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

END TIME_____

Admin JPM
SRO-A2

Facility: Davis-Besse **Task No:** 332-004-02-0300

Task Title: Review Surveillance DB-SP-03451, Boron Injection Flowpath Boric Acid Pump 2 Test

K/A Reference: 2.2.12 (4.1) **Job Performance Measure No**: SRO-A2 (JPM 279)

Examinee: _____

Examiner: _____ **Date:** _____

Method of testing:

Simulated Performance ____ Actual Performance __X__

Classroom _X__ Simulator ____ 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:
Determine Pump Differential Pressure and Vibrations are not within the acceptable range.

Required Materials:
Completed copy of DB-SP-03451, Boron Injection Flowpath Boric Acid Pump 2 Test.
Completed copy of DB-MM-05003 Enclosure 1
Calculator

General References:
NOP-WM-2003

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

Time Critical Task:
No

Alternate Path:
No

Validation Time:
30 minutes

EXAMINER COPY

INITIAL CONDITIONS:

The plant is in Mode 1 with all systems in normal alignment

The Operators have just completed the quarterly test of Boric Acid Pump 2 in accordance with DB-SP-03451, Boron Injection Flowpath Boric Acid Pump 2 Test

INITIATION CUE:

You are to Review/Approve completed Surveillance DB-SP-03451, Boron Injection Flowpath Boric Acid Pump 2 Test. Document the results of your review in the comments section of the Test Cover Sheet

(Hand Candidate a completed copy of DB-SP-03451 with unacceptable incorrect ΔP and out of specification horizontal and axial vibrations)

CANDIDATE COPY

INITIAL CONDITIONS:

The plant is in Mode 1 with all systems in normal alignment

The Operators have just completed the quarterly test of Boric Acid Pump 2 in accordance with DB-SP-03451, Boron Injection Flowpath Boric Acid Pump 2 Test

INITIATION CUE:

You are to Review/Approve completed Surveillance DB-SP-03451, Boron Injection Flowpath Boric Acid Pump 2 Test. Document the results of your review in the comments section of the Test Cover Sheet

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: _____

1. PERFORMANCE STEP: Reviews DB-SP-03451, Boron Injection Flowpath Boric Acid Pump 2 Test.

   STANDARD: Reviews test for completeness and consults the Acceptance Criteria for acceptable performance.

   CUE: **None**

SAT UNSAT

2. PERFORMANCE STEP: MU347, Boric Acid Pump 2 Discharge Check, obtained full forward flow as evidenced by flow greater than or equal to 25 gpm as read on FI MU41.

   STANDARD: Reviews Attachment 1, Section 1 to verify greater than or equal to 25 gpm flow achieved and determines acceptance criteria is met.

   CUE: **None**

SAT UNSAT

3. PERFORMANCE STEP: MU346, Boric Acid Pump 1 Discharge Check, prevented reverse flow as evidenced by flow greater than or equal to 25 gpm as read on FI MU41.

   STANDARD: Reviews Attachment 1, Section 1 to verify greater than or equal to 25 gpm flow achieved and determines acceptance criteria is met.

   CUE: **None**

SAT UNSAT

4 PERFORMANCESTEP: Boric Acid Pump 2 upper motor bearing vertical vibration measurement is less than or equal to 0.684 inches/sec.

STANDARD: Compares Boric Acid Pump 2 actual upper motor vertical vibration recorded on attached Enclosure 1 of DB-MM-05003 to the Acceptable Range and determines acceptance Criteria is met.

COMMENT: Actual recorded value is 0.525 inches/sec.

CUE: **None**

SAT UNSAT

5 PERFORMANCE STEP: Boric Acid Pump 2 upper motor bearing horizontal vibration measurement is less than or equal to 0.330 inches/sec.

STANDARD: Compares Boric Acid Pump 2 actual upper motor horizontal vibration recorded on attached Enclosure 1 of DB-MM-05003 to the Acceptable Range and determines acceptance Criteria is met.

COMMENT: Actual recorded value is 0.225 inches/sec.

CUE: **None**

SAT UNSAT

6 PERFORMANCE STEP: **.....C.....** Boric Acid Pump 2 upper motor bearing axial vibration measurement is less than or equal to 0.391 inches/sec.

STANDARD: Compares Boric Acid Pump 2 actual upper motor axial vibration recorded on attached Enclosure 1 of DB-MM-05003 to the Acceptable Range and determines upper motor bearing axial vibration measurement is greater than the acceptable range.

COMMENT: Actual recorded value is 0.462 inches/sec.

CUE: **None**

SAT UNSAT

7. PERFORMANCE STEP: **.....C.....** Boric Acid Pump 2 differential pressure was within the quarterly surveillance test acceptance range of 81.69 to 96.61 psid at a flow rate of 25.0 to 25.5 gpm.

STANDARD: Compares Boric Acid Pump 2 differential pressure recorded on Attachment 1 to the Acceptable Range and **determines differential pressure is less than the acceptable range.**

COMMENT: Actual recorded value is 80.67 psid.

CUE: **None**

SAT UNSAT

---

8. PERFORMANCE STEP: Document the results of the review in the comments section of the Test Cover Sheet.

STANDARD: Lists the following on the coversheet:

- Upper motor bearing axial vibration measurement does not meet acceptance criteria (greater than the acceptable range – Step 5.5)
- Differential pressure does not meet acceptance criteria (less than the acceptable range - Step 5.6)

COMMENT:

- Examinee may update Test Cover Sheet to identify FAILED test, UNACCEPTABLE Technical Specification Data and NO CREDIT.
- Examinee may specify Condition Report (s) required
- Examinee may declare pump inoperable
- Examinee may update Test Cover Sheet to take credit for a partial test

SAT UNSAT

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

END TIME _____

Admin JPM
SRO-A3

Facility: Davis-Besse **Task No:** 333-008-01-0300

Task Title: Perform Rad Liquid Release Admin checks

K/A Reference: 2.3.6 3.8 **Job Performance Measure No:** SRO-A3 (JPM 280)

Examinee: _____

NRC Examiner: _____ **Date:** _____

Method of testing:

Simulated Performance ___ Actual Performance _X_

Classroom _X_ Simulator ___ 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:
Identify correct ODCM requirements and correct Release EAL RU1.1 setpoints

Required Materials:
In progress procedure DB-OP-03011 for releasing the MWMT
OffSite Dose Calculation Manual

General References:
None

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

Time Critical Task:
No

Alternate Path:
No

Validation Time:
15 minutes

EXAMINER COPY

INITIAL CONDITIONS:

A Radioactive Liquid Batch Release permit is in progress for releasing the Miscellaneous Waste Monitor tank. Sampling and Analysis is complete.

Chemistry has approved the Release and returned the permit to Operations.

Section 4.2, Miscellaneous Waste Monitor Tank (MWMT) Release Administrative Checks, is in progress for approving the Release Valve Lineup, complete through step 4.2.6.

It has just been determined computer point F201 and all inputs are non functional.

The High Alarm for Computer Point F671, Misc Wst Sys Out Flow, is set at 90 gpm.

Attachment 20, Setting Digital Setpoints, has been completed by another operator.

INITIATION CUE:

Complete Section 4.2, steps 4.2.7 through 4.2.13 of Miscellaneous Waste Monitor Tank (MWMT) Release Administrative Checks. You are authorized to perform any Shift Manager actions as delegated duties.

(Provide Candidate a copy of the in-progress DB-OP-03011 for releasing the MWMT, and make available the Offsite Dose Calculation Manual)

CANDIDATE COPY

INITIAL CONDITIONS:

A Radioactive Liquid Batch Release permit is in progress for releasing the Miscellaneous Waste Monitor tank. Sampling and Analysis is complete.

Chemistry has approved the Release and returned the permit to Operations.

Section 4.2, Miscellaneous Waste Monitor Tank (MWMT) Release Administrative Checks, is in progress for approving the Release Valve Lineup, complete through step 4.2.6.

It has just been determined computer point F201 and all inputs are non functional.

The High Alarm for Computer Point F671, Misc Wst Sys Out Flow, is set at 90 gpm.

Attachment 20, Setting Digital Setpoints, has been completed by another operator.

INITIATION CUE:

Complete Section 4.2, steps 4.2.7 through 4.2.13 of Miscellaneous Waste Monitor Tank (MWMT) Release Administrative Checks. You are authorized to perform any Shift Manager actions as delegated duties.

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 required unless denoted in the "Comments".

START TIME: _____

1. PERFORMANCE STEP: Complete step 4.2.7. Record ODCM action statements on Step 5.a. and sign item 4.i.
.....C.....

   STANDARD: Refers to the Off-site Dose Calculation Manual, Table 2-1. Documents on Attachment 1, Radioactive Liquid Batch Release Permit step 5.a., that instrument 2.b. (F201) is not functional and Action B is required. Documents required action as follows (exact wording is not required):

   ACTION B: With less than the number of required channels FUNCTIONAL, effluent releases via this pathway may continue provided the flow rate is estimated at least once per 4 hours during actual releases. Pump curves may be used to estimate flow.

   Signs item 4.i on attachment 1.

   CUE: **None**

SAT UNSAT

2. PERFORMANCE STEP: Refer to Attachment 1, step 11.a and record step 4.2.8 as N/A

   STANDARD: Refers to Attachment 1, step 11.a and determines 4.2.8 is N/A

   CUE: **None**

SAT UNSAT

3. PERFORMANCE STEP: Complete step 4.2.9. Set the high alarm for computer point F671 at 90 gpm

   STANDARD: Initial conditions state that the high alarm for computer point F671 is set to 90 gpm.

   CUE: **None**

SAT UNSAT

4. PERFORMANCE STEP: Record step 4.2.10 as N/A due to all inputs to F201 being non-functional.

   STANDARD: Mark step 4.2.10 as N/A

   NOTE: Step 4.3.29.a will not be performed due to all inputs to F201 are non-functional.

   CUE: **None**

SAT UNSAT

5. PERFORMANCE STEP: Record step 4.2.11 as N/A due to RE1878A and 1878B being functional

   STANDARD: Refer to steps 4.2.2, 4.2.4, 4.2.5, 4.2.6 and step 4.b. on Attachment 1 and determine RE1878A and 1878B are functional. Record step 4.2.11 as N/A

   CUE: **None**

SAT UNSAT

6. PERFORMANCE STEP: Complete step 4.2.12, Perform Attachment 20

   STANDARD: Verifies Attachment 20 has been completed as initial conditions state, and initials step 4.2.12 complete.

   CUE: **None**

SAT UNSAT

7. PERFORMANCE STEP: Complete step 4.2.13. Perform Attachment 24, EAL Release Limit Worksheet **.....C.....**

   STANDARD: Refer to step 10.c. on Attachment 1, Radioactive Liquid Batch Release Permit
   - Record RE1770A and RE1770B as N/A
   - Record 2.8E5 in high setpoint blocks for RE1878A and RE1878B
   - Record 5.6E5 in RU1 Limit blocks for RE1878A and RE1878B

   CUE: **If asked**, **Independent Verification is complete**

SAT UNSAT

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

END TIME

Admin JPM
SRO-A4

Facility: Davis-Besse **Task No:** 334-01-05-0300

Task Title: EAL Classification and Initial Notification

K/A Reference: 2.4.41 (4.6) **Job Performance Measure No**: RO-A4 (JPM 230)

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:
Declare a SITE AREA EMERGENCY within 15 minutes then initiate a notification to State and County representatives using the 4-way phone within 15 minutes of the time the SITE AREA EMERGENCY was declared.

Required Materials:
- RA-EP-01500, Emergency Notification
- RA-EP-01800, Site Area Emergency
- DBEP-010, FENOC Nuclear Power Plant Initial Notification Form
- DBEP-012, Davis-Besse Emergency Notification Cover Sheet
- NORM-LP-5001
- RA-EP-02110

General References: None

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

Time Critical Task: Yes

Alternate Path: No

Validation Time: 30 minutes

SIMULATOR INSTRUCTIONS

TASK DESCRIPTION:

EAL Classification and Initial Notification

INITIAL CONDITION:

SGTR (320 gpm) on #2 SG
Main Steam Safety Valves on #2 SG lifted and at least one has failed to reseat

Annunciator 7-6-A, STA SEISMIC INSTR ON
Annunciator 9-4-A, VAC SYS DISCH RAD HI
Annunciator 12-1-B, MN STM LINE 2 RAD HI

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

Freeze simulator when IC is established

MALFUNCTIONS/FAILURE TO INSERT:

EXAMINER COPY

INITIAL CONDITIONS:

You are the Shift Manager.

The reactor was operating at 100% power.

EDG #1 is Inoperable due to maintenance.

INITIATING CUES:

The station experienced an earthquake as felt by the Control Room operators and indicated by the following indications:

- Annunciator 7-6-A, STA SEISMIC INSTR ON
- OBE alarm on seismic panel C5764A

Shortly afterwards, the following indications are noticed:

- Annunciator 9-4-A, VAC SYS DISCH RAD HI
- Annunciator 12-1-B, MN STM LINE 2 RAD HI

The Unit Supervisor entered DB-OP-02000, RPS, SFAS, SFRCS TRIP, OR SG TUBE RUPTURE, and tripped the reactor. Following the successful reactor trip, the following abnormal conditions were discovered:

- Main Steam Safety Valves on #2 OTSG lifted and at least one has failed to reseat (as observed and reported by Security).
- The ATC operator has calculated the RCS leak rate to be 320 gallons per minute.

The Unit Supervisor continues to direct recovery actions in accordance with DB-OP-02000 Section 8, SGTR and told you to refer to RA-EP-01500, Emergency Classification.

Determine if any Emergency Action Levels have been exceeded and perform the duties of the Emergency Director if required.

This is a time critical JPM.

CANDIDATE COPY

INITIAL CONDITIONS:

You are the Shift Manager.

The reactor was operating at 100% power.

EDG #1 is Inoperable due to maintenance.

INITIATING CUES:

The station experienced an earthquake as felt by the Control Room operators and indicated by the following indications:

- Annunciator 7-6-A, STA SEISMIC INSTR ON
- OBE alarm on seismic panel C5764A

Shortly afterwards, the following indications are noticed:

- Annunciator 9-4-A, VAC SYS DISCH RAD HI
- Annunciator 12-1-B, MN STM LINE 2 RAD HI

The Unit Supervisor entered DB-OP-02000, RPS, SFAS, SFRCS TRIP, OR SG TUBE RUPTURE, and tripped the reactor. Following the successful reactor trip, the following abnormal conditions were discovered:

- Main Steam Safety Valves on #2 OTSG lifted and at least one has failed to reseat (as observed and reported by Security).
- The ATC operator has calculated the RCS leak rate to be 320 gallons per minute.

The Unit Supervisor continues to direct recovery actions in accordance with DB-OP-02000 Section 8, SGTR and told you to refer to RA-EP-01500, Emergency Classification.

Determine if any Emergency Action Levels have been exceeded and perform the duties of the Emergency Director if required.

This is a time critical JPM.

PERFORMANCE INFORMATION

NOTE: Critical steps denoted with a "C". Failure to meet any one of these standards for this item constitutes failure. Sequence is assumed unless denoted in the "Comments".

START TIME: _____

1. PERFORMANCE STEP: Locate the correct procedure guidance.

   STANDARD: Reviews RA-EP-01500, Emergency Classification, and/or the wallboard (DBRM-EMER-1500B).

   NOTE: The clock starts when candidate repeats back task or begins his review of RA-EP-01500, Emergency Classification, and/or the wallboard

   CUE: "Clock starts now"
   Hand candidate a clean copy of RA-EP-01500, Emergency Classification

   Time:_____

   _____
   SAT UNSAT

2. PERFORMANCE STEP: Classify the event.
   .....C.....

   STANDARD: Classifies the event as a Site Area Emergency per EAL FS1.

   COMMENT: Event must be classified within 15 minutes.

   CUE: **If asked, provide an independent check of the selected EAL**

   Time: _____

   _____
   SAT UNSAT

3. PERFORMANCE STEP: Locate the correct procedure.

   STANDARD: Obtains RA-EP-01800, Site Area Emergency.

   CUE: **Hand candidate a clean copy of RA-EP-01800, Site Area Emergency**

   _____
   SAT UNSAT

4. PERFORMANCE STEP: Record the time a SITE AREA EMERGENCY was declared

   STANDARD: Records time SITE AREA EMERGENCY was declared.

   CUE: **None**

SAT UNSAT

5. PERFORMANCE STEP: Sound the “Initiate Emergency Procedures” station alarm.

   STANDARD: Presses the "EMER" button on the Gai-Tronics box on either the RO's desk or at the Back Panel C5722 (HSG 3-3524).

   CUE: **None**

SAT UNSAT

6. PERFORMANCE STEP: Announce the classification to the station.

   STANDARD: Makes a plant announcement over the Gai-Tronics.

   CUE: **None**

SAT UNSAT

7. PERFORMANCE STEP: Direct the Secondary Alarm Station (SAS) to make announcement over the Owner Controlled Area Public Address System.

   STANDARD: Contact the Security organization utilizing the Security ring-down telephone

   CUE: **Booth Operator**, **repeat back the direction as given.**

SAT UNSAT

8. PERFORMANCE STEP: Direct the Central Alarm Station (CAS) to notify the ERO of the SITE AREA EMERGENCY in accordance with RA-EP-02110, Emergency Notification, using event code 3333.

   STANDARD: Contact the Security organization utilizing the Security ring-down telephone

   CUE: **Booth Operator**, **repeat back the direction as given.**

SAT UNSAT

9. PERFORMANCE STEP: Determine the radiological release status for the event
.....C.....

STANDARD: Refers to initiating cues, determines, “A Release is in Progress.”
May refer to NORM-LP-5001, FENOC Position On "Release In Progress"

CUE: **If necessary, hand candidate a clean copy of NORM-LP-5001, FENOC Position On "Release In Progress**

SAT UNSAT

10. PERFORMANCE STEP: Fill out and approve an FENOC Nuclear Power Plant Initial Notification Form (DBEP-010) AND fill out a Davis-Besse Emergency Notification Cover Sheet (DBEP-012).

STANDARD: **On Cover Sheet (DBEP-012)**
Check box for, FENOC Nuclear Power Plant Initial Notification Form
Check box for, Drill
Sign “Form completed by” section
Ensure signature is obtained for the “accuracy verified by” section

On Notification Form (DBEP-010)
Sign “Emergency Director Approved” box
Line 2 check box “A Drill”
Line 3 check box “a.” and “SITE AREA EMERGENCY”
Line 4 check box “a.”
Line 5 check box “c.”

CUE: **If asked, provide an independent check of the data entered and sign the Davis Besse Notification Cover Sheet.**

If necessary, hand candidate a copy of RA-EP-02110 EMERGENCY NOTIFICATION

SAT UNSAT

11. PERFORMANCE STEP: Initiate a notification of the SITE AREA EMERGENCY with Ottawa County, Lucas County, and the State of Ohio
.....C.....

NOTE: JPM is complete when candidate makes contact on 4-way phone with Booth Operator

STANDARD: Picks up the 4-way phone within 15 minutes of the time the SITE AREA EMERGENCY was declared.

Time:_____

CUE: **None**

SAT UNSAT

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

END TIME_____

FENOC NUCLEAR POWER PLANT INITIAL NOTIFICATION FORM
Davis Besse
DBEP-010-11

USE FOR:
- **INITIAL CLASSIFICATION,**
- **CHANGES IN CLASSIFICATION,**
- **CHANGES IN PROTECTIVE ACTION RECOMMENDATIONS.**
- **EVENT TERMINATION**

STATE / COUNTY USE ONLY
DATE: _____ TIME: _____
MESSAGE NO: _____

1. This is the: Davis-Besse Nuclear Power Station

2. This is: ☐ An Actual Emergency ☐ A Drill

3. ☐ a. A(n) ☐ GENERAL EMERGENCY ☐ SITE AREA EMERGENCY ☐ ALERT ☐ UNUSUAL EVENT
was declared at: _____ (TIME) on _____ (DATE) based on EAL: _____

☐ b. The Emergency situation has been terminated at: _____ (TIME) on _____ (DATE)

☐ c. The Protective Action Recommendation is being changed at: _____ (TIME) on _____ (DATE)

4. The radiological conditions are:

☐ a. A non-routine release of radioactive material, as a result of this event, is in progress

☐ b. The release of radioactive material associated with this event has been terminated.

☐ c. NO Radiological Release in progress as a result of this event.

5. Utility Protective Action Recommendations (PAR's):

☐ a. Evacuation:

(check applicable subareas)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures. The general public in unaffected areas should be advised to go indoors and monitor EAS broadcasts.

☐ b. Sheltering:

(check applicable subareas)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 11

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures. The general public in unaffected areas should be advised to go indoors and monitor EAS broadcasts.

☐ c. None

For Utility Use Only

Approved: _____
Emergency Director

DAVIS-BESSE EMERGENCY NOTIFICATION COVER SHEET

DBEP-012-11

☐ **FENOC Nuclear Power Plant Initial Notification Form** **USE FOR:** ▪ **INITIAL CLASSIFICATIONS,** ▪ **CHANGES IN CLASSIFICATION,** ▪ **CHANGES IN PROTECTIVE ACTION RECOMMENDATIONS.** ☐ **FENOC Follow-Up/Periodic Update Notification** **USE ONLY FOR UPDATING STATUS OF CURRENT CLASSIFICATION.** **DO NOT USE FOR CHANGING CLASSIFICATIONS OR CHANGING PROTECTIVE ACTION RECOMMENDATIONS.**	☐ **ACTUAL EMERGENCY** **(Check Actual Emergency only if a real plant emergency exists)** ☐ **DRILL**

FENOC Nuclear Power Plant Initial Notification Form / FENOC Follow-Up/Periodic Update Notification Form completed by: _____

FENOC Nuclear Power Plant Initial Notification Form / FENOC Follow-Up/Periodic Update Notification Form accuracy verified by: _____

Communicator:

1. Ensure the Emergency Director has signed the FENOC Nuclear Power Plant Initial Notification Form / FENOC Follow-Up/Periodic Update Notification Form.
2. Initiate the 4-Way Phone.
3. As parties answer, identify yourself and your facility.
4. Obtain and fill in information below:

	TIME INITIAL CONTACT MADE	COMPLETION TIME OF CALL	4-WAY PHONE USED? YES	4-WAY PHONE USED? NO	TIME OF CALLBACK (IF 4-WAY NOT USED)	INDIVIDUAL CALLING BACK (IF 4-WAY NOT USED)
OTTAWA COUNTY	____	____	☐	☐	____	
LUCAS COUNTY	____	____	☐	☐	____	
STATE OF OHIO	____	____	☐	☐	____	

5. **FENOC Nuclear Power Plant Initial Notification Form**: Read information on the attached FENOC Nuclear Power Plant Initial Notification Form over the phone, document above the time lines 1 through 5 have been communicated, and then fax the completed Initial Notification Form (DBEP-010) to Ottawa Co, Lucas Co, and the State of Ohio using the fax machine "Group Tx" key labeled "INF FORM".

   OR

   FENOC Follow-Up/Periodic Update Notification Form First: Fax the completed FENOC Follow-up/Periodic Update Notification form (DBEP-009) using the fax machine "Group Tx" key labeled "PERIODIC" to Ottawa Co, Lucas Co, and the State of Ohio, and then verify the information over the phone.

NOTE: This coversheet should NOT be FAXED.

☐ Control Room
☐ Emergency Operations Facility

_____
Signature of Communicator transmitting information

DAVIS-BESSE EMERGENCY NOTIFICATION COVER SHEET (OPSJMP230, R2 answer key page 1)
DBEP-012-11

☒ **FENOC Nuclear Power Plant Initial Notification Form** **USE FOR:** ▪ **INITIAL CLASSIFICATIONS,** ▪ **CHANGES IN CLASSIFICATION,** ▪ **CHANGES IN PROTECTIVE ACTION RECOMMENDATIONS.** ☐ **FENOC Follow-Up/Periodic Update Notification** **USE ONLY FOR UPDATING STATUS OF CURRENT CLASSIFICATION.** **DO NOT USE FOR CHANGING CLASSIFICATIONS OR CHANGING PROTECTIVE ACTION RECOMMENDATIONS.**	☐ **ACTUAL EMERGENCY** **(Check Actual Emergency only if a real plant emergency exists)** ☒ **DRILL**

FENOC Nuclear Power Plant Initial Notification Form / FENOC Follow-Up/Periodic Update Notification Form completed by: *Candidate Signature*

FENOC Nuclear Power Plant Initial Notification Form / FENOC Follow-Up/Periodic Update Notification Form accuracy verified by: *Evaluator Signature*

Communicator:

1. Ensure the Emergency Director has signed the FENOC Nuclear Power Plant Initial Notification Form / FENOC Follow-Up/Periodic Update Notification Form.
2. Initiate the 4-Way Phone.
3. As parties answer, identify yourself and your facility.
4. Obtain and fill in information below:

	TIME INITIAL CONTACT MADE	COMPLETION TIME OF CALL	4-WAY PHONE USED? YES	NO	TIME OF CALLBACK (IF 4-WAY NOT USED)	INDIVIDUAL CALLING BACK (IF 4-WAY NOT USED)
OTTAWA COUNTY			☐	☐	____	
LUCAS COUNTY			☐	☐	____	
STATE OF OHIO			☐	☐	____	

5. **FENOC Nuclear Power Plant Initial Notification Form**: Read information on the attached FENOC Nuclear Power Plant Initial Notification Form over the phone, document above the time lines 1 through 5 have been communicated, and then fax the completed Initial Notification Form (DBEP-010) to Ottawa Co, Lucas Co, and the State of Ohio using the fax machine "Group Tx" key labeled "INF FORM".

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NOTE: This coversheet should NOT be FAXED.

☐ Control Room
☐ Emergency Operations Facility

Signature of Communicator transmitting information

FENOC NUCLEAR POWER PLANT INITIAL NOTIFICATION FORM
Davis Besse
DBEP-010-11

USE FOR:
- **INITIAL CLASSIFICATION,**
- **CHANGES IN CLASSIFICATION,**
- **CHANGES IN PROTECTIVE ACTION RECOMMENDATIONS.**
- **EVENT TERMINATION**

STATE / COUNTY USE ONLY
DATE: _____ TIME: _____
MESSAGE NO: _____

1. This is the: Davis-Besse Nuclear Power Station

2. This is: ☐ An Actual Emergency ☒ A Drill

3. ☒ a. A(n) ☐ GENERAL EMERGENCY ☒ SITE AREA EMERGENCY ☐ ALERT ☐ UNUSUAL EVENT
was declared at: **≤15 min** (TIME) on **Today** (DATE) based on EAL: **FS1**

☐ b. The Emergency situation has been terminated at: _____ (TIME) on _____ (DATE)

☐ c. The Protective Action Recommendation is being changed at: _____ (TIME) on _____ (DATE)

4. The radiological conditions are:

☒ a. A non-routine release of radioactive material, as a result of this event, is in progress

☐ b. The release of radioactive material associated with this event has been terminated.

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5. Utility Protective Action Recommendations (PAR's):

☐ a. Evacuation:

(check applicable subareas)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures. The general public in unaffected areas should be advised to go indoors and monitor EAS broadcasts.

☐ b. Sheltering:

(check applicable subareas)

☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 11

AND that potassium iodide (KI) be administered to the general public in accordance with State procedures. The general public in unaffected areas should be advised to go indoors and monitor EAS broadcasts.

☒ c. None

For Utility Use Only

Approved: *Candidate Signature* _____
Emergency Director