Facility: Davis-Besse _____   **Task No:** 115-001-02-0100 _____

Task Title: Calculate RCS Flow with F755 Inoperable _____

K/A Reference: 2.1.25 (2.8/3.1) _____   **Job Performance Measure No**: _A-6 (RO only)_

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 unit is at 100% power
The crew is performing DB-OP-03006, Miscellaneous Instrument Shift Checks
The Plant Process Computer is available but Computer Point F744, RC CLG TOTAL FLOW
(KGPM), is unavailable
The SPDS is not available

Task Standard:
Perform miscellaneous instrument shift checks

Required Materials:

General References:
DB-OP-03006, Miscellaneous Instrument Shift Checks
Steam Tables

Initiating Cue:
The Unit Supervisor directs you to perform Attachment 7: Calculation of RC Total Flow
(Computer Point F744 Inoperable), in accordance with step 4.35.1.b of DB-OP-03006

Evaluator Note: Provide a copy of DB-OP-03006, Attachment 7 and Steam Tables

Time Critical Task: No

Validation Time: 15 minutes

INITIAL CONDITIONS:

The unit is at 100% power

The crew is performing DB-OP-03006, Miscellaneous Instrument Shift Checks

The Plant Process Computer is available but Computer Point F744, RC CLG TOTAL FLOW (KGPM), is unavailable

The SPDS is not available

INITIATING CUE:

The Unit Supervisor directs you to perform Attachment 7: Calculation of RC Total Flow (Computer Point F744 Inoperable), in accordance with step 4.35.1.b of DB-OP-03006

PERFORMANCE INFORMATION

	START TIME:_____

---

1. PERFORMANCE STEP: Using the computer and trend recorders, find and enter values
    ___√___   on Attachment 7

STANDARD: Find and enter the correct values on Attachment 7

Computer Points	Expected Value
• P722 (RC LOOP 1 NR PRESS)	2145.3 PSIG
• P729 (RC LOOP 2 NR PRESS)	2155.3 PSIG
• T780 (RCP 1-1 Disch NR Temp)	559.6 ˚F
• T800 (RCP 1-2 Disch NR Temp)	560.4 ˚F
• T820 (RCP 2-1 Disch NR Temp)	559.7 ˚F
• T840 (RCP 2-2 Disch NR Temp)	560.3 ˚F
• F857 (RC Loop 1 HLG Flow)	74.9 (MPPH)
• F858 (RC Loop 2 HLG Flow)	75.5 (MPPH)

COMMENT : The Simulator may provide different values than those above.

CUE: **Once correct computer points are found, then provide a copy of
           Attachment 7 with the computer points filled in.**

                                                                             _____
                                                                             SAT   UNSAT

---

2.   PERFORMANCE STEP: Record Specific Volume using ASME Steam Tables, pg. 183 on
     ___√___   Attachment 7

STANDARD: Record Loop 1 average Tavg: (T780 + T800)/2 = **560**

                Record Loop 1 RCS Pressure: P722 + 14.7 = **2160**

                Interpolate Specific Volume (V1) using Steam Table = **.0216 to .0217**

CUE: **Once page 183 in the Steam Tables is found, then
           provide a copy of page 183.**
                                                                             _____
                                                                             SAT   UNSAT

---

3.   PERFORMANCE STEP: Calculate Loop 1 Flow
     √

     STANDARD: Performs calculation:

                 (F857 reading)(V1)(124.675) = **202.4139** KGPM

     COMMENT: Loop 1 flow calc between **202** and **203** KGPM is satisfactory

     CUE: **None**

                                                 SAT   UNSAT

4.   PERFORMANCE STEP: Record Specific Volume using ASME Steam Tables, pg. 183 on
     √   ATTACHMENT 7

     STANDARD: Record Loop 2 average Tavg: (T820 + T840)/2 = **560**

                         Record Loop 2 RCS Pressure: P729 + 14.7 = **2170**

                         Interpolate Specific Volume (V2) using Steam Table = **.0216 to .0217**

     CUE: **None**

                                                   SAT   UNSAT

5.   PERFORMANCE STEP: Calculate Loop 2 Flow
     √

     STANDARD: Performs calculation:

                   (F858 reading)(V2)(124.675) = **203.9977** KGPM

     COMMENT: Loop 2 flow calc between **203** and **205** KGPM is satisfactory

     CUE: **None**

                                                 SAT   UNSAT

6.   PERFORMANCE STEP: Calculate RC Total Flow (Loop 1 + Loop 2)
     √

     STANDARD: Add Loop 1 and Loop 2 flows

                   Loop 1 + Loop 2 = **406.412**

     COMMENT: Total Flow between **405** and **408** KGPM is satisfactory

     CUE: **None**

                                                 SAT   UNSAT

8.   PERFORMANCE STEP: Complete ATTACHMENT 7

      STANDARD: Signs and dates Calculation Performed by.

      CUE: **None**

                                                             SAT   UNSAT

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

                                                              END TIME

Verification of Completion

Job Performance Measure No. ___A-6___

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation:

Question: _____

_____

_____

Response: _____

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Facility: Davis-Besse   **Task No:** 331-041-02-0300

Task Title: Perform an On-line Risk Determination

K/A Reference: 2.1.19 (3.0/3.0)   **Job Performance Measure No**: A -1 (SRO only)

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 100%.
There is no adverse weather in the area or predicted
Ambient Conditions: Winter
Ambient Conditions: 50°F
Intake Temperature is 40°F
Current risk level is YELLOW because Aux. Feed Pump 2 (DBP 14-2) is out of service for
maintenance
At turnover, equipment lineup was as follows:
     Instrument Air Dryers 3 and 4 are in service
     Station Air Compressor 2 is in service
     CCW Pump 1 is running
     CCW Pump 2 in standby
     CAC 1 and CAC 2 are in service
     Makeup Pump 2 is running
     RC 11, PORV Block Valve is open
     Service Water Pump 1 and Service Water Pump 2 are running
     TPCW Heat Exchangers 2 and 3 are in service
      TPCW Pump 1 and TPCW Pump 2 are running

Task Standard:
Perform an On-line Risk Determination

Required Materials:
Computer with Safety Monitor System installed

General References:
DBBP-OPS-0003, On-Line Risk Management Process, Attachment 5

Initiating Cue:
RC 11, PZR PORV Block Valve, has just been closed due to PORV leakage
The Shift Manager directs you to use the Safety Monitor to evaluate plant risk in accordance with Attachment 5 of DBBP-OPS-0003, On-Line Risk Management Process

Time Critical Task: No

Validation Time: 15 minutes

INITIAL CONDITIONS:

The plant is at 100%

There is no adverse weather in the area or predicted

Ambient Conditions: Winter

Ambient Conditions: 50°F

Intake Temperature is 40°F

Current risk level is YELLOW because Aux. Feed Pump 2 (DBP 14-2) is out of service for maintenance

At turnover, equipment lineup was as follows:

    Instrument Air Dryers 3 and 4 are in service
    Station Air Compressor 2 is in service
    CCW Pump 1 is running
    CCW Pump 2 in standby
    CAC 1 and CAC 2 are in service
    Makeup Pump 2 is running
    RC 11, PORV Block Valve is open
    Service Water Pump 1 and Service Water Pump 2 are running
    TPCW Heat Exchangers 2 and 3 are in service
    TPCW Pump 1 and TPCW Pump 2 are running

INITIATING CUES:

RC 11, PZR PORV BLOCK VALVE, has just been closed due to PORV leakage

The Shift Manager directs you to use the Safety Monitor to evaluate plant risk in accordance with Attachment 5 of DBBP-OPS-0003, On-Line Risk Management Process

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Log on to Safety Monitor using one of the specified passwords
   ___√___

   STANDARD: Log on using (user id) SRO and (password) operations OR (user id) SRO1 and (password) operations1 OR (user id) SRO2 and (password) operations2

   CUE: **Provide the examinee a copy of Attachment 5 of DBBP-OPS-0003**

   _____
   SAT UNSAT

2. PERFORMANCE STEP: Determine PORV/Block Valve is modeled in PSA

   STANDARD: Determines PORV/Block Valve is modeled in PSA and proceeds to Section 4.2.

   COMMENT: Candidate may choose to use the computer to make this determination but that is NOT required since it would be common knowledge

   CUE: **None**

   _____
   SAT UNSAT

3. PERFORMANCE STEP: Select "Hypothetical mode" from the drop down menu next to "
   ___√___   Operation"

   STANDARD: "Hypothetical mode" selected.

   CUE: **None**

   _____
   SAT UNSAT

4. PERFORMANCE STEP: Click on "Case," and select "New" in the dropdown lists
   ___√___

   STANDARD: Clicks on "Case," and selects "New"

   CUE: **None**

   _____
   SAT UNSAT

5.   PERFORMANCE STEP: Selects "No," when ask to save

    STANDARD: Selects "No"

    CUE: **None**

                                           _____
                                           SAT UNSAT

6.   PERFORMANCE STEP: Selects "No Initial Configurations" and clicks "OK"
     ___√___

    STANDARD: Select "No Initial configurations" and click "OK"

    CUE: **None**

                                           _____
                                           SAT UNSAT

7.   PERFORMANCE STEP: Establish or verify minimum proper plant alignment before plant
     ___√___   risk is calculated

    STANDARD: Click on "View/Change Plant Configuration"

    CUE: **None**

                                           _____
                                           SAT UNSAT

8.   PERFORMANCE STEP: Establish or verify minimum proper plant alignment (before plant
     ___√___   risk is calculated) as follows:

    STANDARD: Click on "Alignment"

    CUE: **None**

                                           _____
                                           SAT UNSAT

9.   PERFORMANCE STEP: Establish or verify minimum proper plant alignment before plant
     ___√___   risk is calculated

    STANDARD: At the bottom of the column for "Alignment System" select "All Systems"

    CUE: **None**

                                           _____
                                           SAT UNSAT

10. PERFORMANCE STEP: Ensure the minimum alignments are correct
    √

STANDARD: Correct equipment alignments to match Initial Conditions:
        ____ Instrument Air Dryers 1 and 2 are in standby
        ____ Station Air Compressor 1 is in standby
        ____ CCWP 1 running/CCWP 3 standby is false
        ____ CCWP 2 running/CCWP 1 standby is false
        ____ CCWP 2 running/CCWP 3 standby is false
        ____ CCWP 3 running/CCWP 1 standby is false
        ____ CCWP 3 running/CCWP 2 standby is false
        ____ CAC 3 is stopped
        ____ Makeup Pump 1 is in standby
        ____ RC 11, PORV Block Valve is CLOSED
        ____ Service Water Pump is stopped
        ____ TPCW Heat Exchangers 1 is in standby
        ____ TPCW Pump 3 is stopped

CUE: **None**

_____
SAT UNSAT

11. PERFORMANCE STEP: Ensure the minimum alignments are correct

STANDARD: Verify "Add alignment change" box is checked

CUE: **None**

_____
SAT UNSAT

12. PERFORMANCE STEP: Verifies date and time correct

STANDARD: Select the proper date and time on the "Date/Time of changes" open window

CUE: **None**

_____
SAT UNSAT

13. PERFORMANCE STEP: Input alignment changes
    √

STANDARD: Click "Apply All" and confirm by Clicking "YES"

CUE: **None**

_____
SAT UNSAT

14. PERFORMANCE STEP: Input alignment changes

STANDARD: Clicks on "Calculate" button

CUE: **None**

_____
SAT UNSAT

15. PERFORMANCE STEP: Remove AFP 2 from service
     √

STANDARD: Click on "View/Change Plant Configuration"

CUE: **None**

_____
SAT UNSAT

16. PERFORMANCE STEP: Verify "Components" tab is selected

STANDARD: Verify "Components" tab is selected

CUE: **None**

_____
SAT UNSAT

17. PERFORMANCE STEP: Verify "Remove from service" box is selected

STANDARD: Verify "Remove from service" box is selected

CUE: **None**

_____
SAT UNSAT

18. PERFORMANCE STEP: Ensure date and time correct
     √

STANDARD: Change time to a time later than the last configuration change

CUE: **None**

_____
SAT UNSAT

19. PERFORMANCE STEP: Select DBP 14-2, Aux Feed Pump 1-2, in "Components" window
     √

STANDARD: Double Click on "DBP 14-2 Aux Feed Pump 1-2" in Subsystem 50

CUE: **None**

_____
SAT UNSAT

20. PERFORMANCE STEP: Verify the correct Environmental/Test Factors are entered.

    STANDARD: Click on "Environmental/Test Factors" tab

    CUE: **None**

                                           _____
                                           SAT UNSAT

21. PERFORMANCE STEP: Verify "Set In Effect" box is selected

    STANDARD: Verify "Remove From Service" box is selected

    CUE: **None**

                                           _____
                                           SAT UNSAT

22. PERFORMANCE STEP: Ensure date and time correct

    STANDARD: Change time to a time later than the last configuration change

    CUE: **None**

                                           _____
                                           SAT UNSAT

23. PERFORMANCE STEP: Select Winter Conditions

    STANDARD: Double click on "Winter Conditions"

    CUE: **None**

                                           _____
                                           SAT UNSAT

24. PERFORMANCE STEP: Calculate Risk
    ___√___

    STANDARD: Clicks on the "Calculate" button

    Comment: ORANGE RISK

    CUE: **None**

                                             _____
                                           SAT UNSAT

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

                                           _____
                                           END TIME

Verification of Completion

Job Performance Measure No.   A-1

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation:

Question:_____

_____

_____

Response:_____

_____

_____

_____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Facility: <u>Davis-Besse</u>   **Task No:** <u>333-012-01-3000</u>

Task Title: <u>Review Auxiliary Feedwater Pump 2 Monthly Periodic Test and Determine</u>
      <u>Operability</u>

K/A Reference: <u>2.1.33 (3.4/4.0)</u>   **Job Performance Measure No**: <u>A-2 (SRO only)</u>

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
DB-SP-04159, Auxiliary Feedwater Pump 2 Monthly Periodic Test, has been completed through step 4.75

Task Standard:
Review test for accuracy and determine operability

Required Materials:
Technical Specifications
Calculator

General References:
DB-SP-04159, AFP Monthly Periodic Test

Initiating Cue:
The Shift Manager directs you to review the AFP 2 Monthly Periodic Test and complete the procedure and acceptance criteria

Time Critical Task: No

Validation Time: 15 minute

INITIAL CONDITIONS:

The plant is operating at 100% power

DB-SP-04159, Auxiliary Feedwater Pump 2 Monthly Periodic Test, has been completed through step 4.75

INITIATING CUE:

The Shift Manager directs you to review the AFP 2 Monthly Periodic Test and complete the procedure and acceptance criteria

PERFORMANCE INFORMATION

Start Time _____

.1. PERFORMANCE STEP: Review Attachment 1 data sheet for accuracy

  STANDARD: Identify Attachment 1 of DB-SP-04159 as the correct procedure and attachment

  CUE: **Provide a copy of DB-SP-04159 to the candidate**

                                            _____
                                            SAT UNSAT

2. PERFORMANCE STEP: Determine differential pressure (ΔP) was calculated
    √   incorrectly and is inadequate

  STANDARD: Identify Attachment 1 of DB-SP-04159 and perform the differential pressure (ΔP) calculation

  COMMENT: The correct calculated differential pressure is 1275 psid

  CUE: **None**
                                              _____
                                            SAT UNSAT

3. PERFORMANCE STEP: Evaluate re-calculated differential pressure (ΔP) for AFW
    √   Train 2 operability

  STANDARD: Review DB-SP-04159 acceptance criteria step 5.1, and recognize the correctly calculated ΔP is outside the acceptable range

  CUE: (If asked) **Shift Manager has been informed that the test ΔP is outside the acceptable range. He directs you to determine operability**

                                            _____
                                            SAT UNSAT

.4. PERFORMANCE STEP: Verify AFP 2 speed is between 3595 and 3633 rpm

  STANDARD: Review DB-SP-04159 speed acceptance criteria step 5.2

  CUE: **None**
                                              _____
                                            SAT UNSAT

5.   PERFORMANCE STEP: Review TS 3.7.1.2 or DB-SP-04159 Acceptance
     √   Criteria and determine that AFW Train 2 is inoperable

     STANDARD: Review TS 3.7.1.2 or DB-SP-04159 Acceptance Criteria for
                  operability criteria

     CUE: **(If asked) Shift Manager acknowledges that AFW Train 2 is inoperable**

     _____
     SAT UNSAT

6.   PERFORMANCE STEP: Determine actions to be performed
     √

     STANDARD: Identifies TS 3.7.1.2 Action a. would be taken, restore inoperable train
               within 72 hours or be in HOT STANDBY within 12 hours

     CUE: **What Technical Specification and action statement(s)
          are (is) applicable**
                                                                                    __
                                                                            SAT UNSAT

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

                                                                            _____
                                                                            END TIME

Verification of Completion

Job Performance Measure No. ___A-2___

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation:

Question: _____
_____
_____

Response: _____
_____
_____
_____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Facility: Davis-Besse   **Task No:** 119-023-03-100

Task Title: Review a safety tagout for High Pressure Injection Pump 1 with eSOMS unavailable

K/A Reference: 2.2.13 (3.6/3.8)   **Job Performance Measure No**:   A-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:

The plant is currently operating at 100%
eSOMS is currently out of service and will not be restored for another four hours
High Pressure Injection Pump 1 has a leak on the pump's seal that must be replaced

Task Standard:
Review a safety tagout and correct errors

Required Materials:

General References:

NOP-OP-1001, Clearance/Tagging Program
NOBP-OP-1001, Clearance Program
Operations Schematic, OS-3 (High Pressure Injection)
Initiating Cue:

The Shift Manager directs you to review a safety tagout for High Pressure Injection Pump 1 for
seal replacement and determine if the tagout is acceptable.

Evaluator Note: Provide candidate with copy of Cover Sheet, Index Sheet, tagout sheet, and
OS-3.

Time Critical Task: No

Validation Time: 20 minutes

INITIAL CONDITIONS:

The plant is currently operating at 100%

eSOMS is currently out of service and will not be restored for another four hours

High Pressure Injection 1 has a leak on the pump's seal that must be replaced

INITIATING CUES:

The Shift Manager directs you to review a safety tagout for High Pressure Injection Pump 1 for seal replacement and determine if the tagout is acceptable.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Locate copy of NOP-OP-1001, Clearance/Tagging Program

    STANDARD: Locate copy of NOP-OP-1001, Clearance/Tagging Program, step 4.28

    COMMENT: Sequence is not required for this JPM
                   Hand trainee a copy of NOP-OP-1001

    CUE: **None**

                                                        _____
                                                     SAT UNSAT

2. PERFORMANCE STEP: Review Manual Clearance Tracking Index, NOP-OP-1001-8

    STANDARD: Review index and determine index correctness

    COMMENT: Provide candidate with form NOP-OP-1001-8 (form)

    CUE: **None**

                                                        _____
                                                     SAT UNSAT

3. PERFORMANCE STEP: Review Manual Outage Clearance Coversheet, NOP-OP-1001-7

    STANDARD: Review coversheet and determine coversheet correctness

    COMMENT: Provide candidate with form NOP-OP-1001-7 (form)

    CUE: **None**

                                                        _____
                                                     SAT UNSAT

4.   PERFORMANCE STEP: Review Manual Clearance Tag List, NOP-OP-1001-9
      _____√_____

      STANDARD: Verify clearance provides adequate boundaries, correct job information, and
                 any hazards (none). The following is the correct components to be tagged
                 out:

           A. Candidate identifies the following incorrect actions:
               *1. Pump breaker AD 111 (correct breaker is AC 111) (CRITICAL)
               *2. Pump discharge valve HP 22 (correct valve is HP 24) (CRITICAL)
               *3. Breaker was tagged out after the suction and discharge valves were
                    closed.   (CRITICAL)
                4. HP 12, suction valve, sequenced before HP 24, discharge valve, is
                closed.   (NON- critical)

           B. The candidate corrects the tagging list by:
               *1. Changing AD 111 to AC 111 (in 585' A HVSG Rm)   (CRITICAL)
               *2. Changing HP 22 to HP 24   (CRITICAL)
                3.   Changing Placement Configuration to hang

                     a. AC 111 second, (CRITICAL)
                     b. HP 39 after breaker is tagged   (CRITICAL)
                     c. HP 24 third, (NON-critical)
                     d. HP 12 fourth or fifth (NON-critical)
                     e. Vents and drains last. (CRITICAL)

      COMMENT: Steps with a "*" are CRITICAL actions.

      COMMENT: Provide candidate with form NOP-OP-1001-9 (form)

      CUE: **(If asked) The Shift Manager directs you to make appropriate
             Changes to the clearance request.**
                                                                    _____
                                                                    SAT UNSAT

5.   PERFORMANCE STEP: Inform the Clearance Requester of the needed changes

      STANDARD: Contact the Clearance Requester of needed changes

      CUE: **The Clearance Requester agrees with your changes and asks you to change
            the Clearance Request accordingly**
                                                                    _____
                                                                    SAT UNSAT

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

                                                                    _____
                                                                    END TIME

Verification of Completion

Job Performance Measure No. ___A-3___

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation:

Question:_____
_____
_____

Response:_____
_____
_____
_____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Manual Clearance Tag List NOP-OP-1001-09 Rev. 01										Sheet 1 Of 1		CLEARANCE No. DB-063-0001	
Equipment ID	Equipment Description	Equipment Location	Tag #	Tag Type	Placement Configuration	Hang order	1st Verify	2nd Verify	Restoration Configuration	Clear Order	1st Remove	2nd Remove	Notes
HP 12	HPI PUMP 1 SUCTION	545' ECCS RM 1	01	R	Closed	2			Open				
HP 22	HPI PUMP 1 DISCH	545' ECCS RM 1	02	R	Closed	3			Open				
HP 39	HPI PMP 1 MINIMUM RECIRC TO BWST	565' Aux. Bldg	03	R	Closed	3			Open				
AD111	HPI Pump1 breaker	585' B HVSG Rm	04	R	Racked Out	4			Racked In				
HP 18	HPI PMP1 VENT	545' ECCS RM 1	05	No Tag	Open	5			Closed				
HP 18A	HPI PMP 1 VENT	545' ECCS RM 1	06	No Tag	Open	5			Closed				
HP 16	HPI PMP 1 DRAIN	545' ECCS RM 1	07	No Tag	Open	5			Closed				
HP 16A	HPI PMP 1 DRAIN	545' ECCS RM 1	08	No Tag	Open	5			Closed				
HIS 1524	HPI PMP 1 Control Switch	623' Control Room	09	R	Tagged	1			Tagged Removed				

MANUAL OUTAGE CLEARANCE COVERSHEET

Manual Outage Clearance DB-063-0001	Date 2/9/2008	Time 1200

Equipment ID / Asset Number :
P58-1   /

Description / Reason
Tagout High Pressure Injection Pump 1 (P58-1) for seal replacement

Placement Notes

Cautions
None

Completion Notes

Order Number	FLOC	Description
200283217	P58-1	High Pressure Injection Pump 1

Clearance Acceptance		Work Group Acceptance	
/		/	
Print/Sign	Date	Print/Sign	Date
Clearance Release		**Work Group Release**	
/		/	
Print/Sign	Date	Print/Sign	Date

Status	Name (Print / Sign)	Date / Time
Prepared By	PT/pt	02/09/2008/1200
Reviewed By	/	/
Approved by	/	/
Issued for Work by	/	/
Removal Authorized by	/	/
Clearance Closed by	/	/

MANUAL OUTAGE CLEARANCE TRACKING INDEX

NOP-OP-1001-08 Rev. 01

Clearance Number	Reason of Clearance	Created by (Date / Time)	Reviewed By (Date / Time)	NOMS Generated Number	Transferred to NOMS by
DB-063-0001	Replace HPI 1 seal	pt 2/9/08 / 1200			
- -					
- -					
- -					
- -					
- -					
- -					
- -					
- -					
- -					
- -					
- -					
- -					
- -					

Facility: Davis-Besse   **Task No:** 005-054-05-0100

Task Title: Calculate Steam Generator Leakrate

K/A Reference: 2.3.10   (2.9/3.3)   **Job Performance Measure No**:   A-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 unit is at 100% power
SG 1 has a tube leak
Pressurizer level is 220 inches and steady

Task Standard:

RO: Determine SG leakrate and applicable TS for high leakrate
SRO: Determine SG leakrate, applicable TS for high leakrate, and required actions

Required Materials:

Calculator

General References:

DB-OP-02531, SG Tube Leaks, Attachment 1, SG Tube Leak Rate calculations
Chemistry Sheet (on Simulator Status Board)

Initiating Cue:

The Shift Manager directs you to perform a SG Tube Leak calculation using procedure
DB-OP-02531, Attachment 1 Step 3

Time Critical Task: No

Validation Time: 15 minutes

INITIAL CONDITION:

Any Mode

ADDITIONAL SETUP/DEVIATION FROM INITIAL CONDITION:

None

MALFUNCTIONS/FAILURES TO INSERT:

Raise Steam Jet Air Ejector (SJAE) activity

> Fail RE 1003A to position: IMF CM34E 2.42E-5
> Fail RE 1003B to position: IMF CM33E 3.34E-5
> Start RE 1003A pump

ACTION/CUES:

Step 5: **Steam Jet Air Ejector flow is 15 scfm**

INITIAL CONDITIONS:

The unit is at 100% power

SG 1 has a tube leak

Pressurizer level is 220 inches and steady

INITIATING CUE:

The Shift Manager directs you to perform a SG Tube Leak calculation using procedure DB-OP-02531, Attachment 1, Step 3

PERFORMANCE INFORMATION

START TIME:_____

1. PERFORMANCE STEP: Record Date and time

   STANDARD: Correct date and time used

   CUE: **None**

   SAT   UNSAT

2. PERFORMANCE STEP: Record Steam Jet Air Ejector radiation levels
   √

   STANDARD: Correctly read RE 1003A (250 cpm) and
                            RE 1003B (350 cpm)

   COMMENT:

   CUE: **None**

   SAT   UNSAT

3. PERFORMANCE STEP: Convert RE readings (cpm) to µCi/cc
   √

   STANDARD: Correctly multiply SJAE reading by conversion factor:
                    RE 1003A = 1.63E-06 µCi/cc
                    RE 1003B = 1.12E-05 µCi/cc

   COMMENT: Candidate may round off number

   CUE: **None**

   SAT   UNSAT

4.   PERFORMANCE STEP: Record Steam Jet Air Ejector (SJAE) flow from FI1002
      ___√___

       STANDARD: Communicate with an Equipment Operator to obtain the SJAE flow and
                        correctly record

       CUE: **Steam Jet Air Ejector flow is 15 scfm**

                                                                                    _____
                                                                                    SAT   UNSAT

5.   PERFORMANCE STEP: Record RCS Xe-133 activity from Chemistry sheet
      ___√___

       STANDARD: Correctly record RCS Xe-133 activity (6.66E-3 µCi/cc)

       EVALUATOR NOTE: Chemistry Sheet is on Simulator Status Board

       CUE: **None**

                                                                                    _____
                                                                                    SAT   UNSAT

6.   PERFORMANCE STEP: Calculate primary-to-secondary tube leak using RE 1003B
      ___√___

       STANDARD: Correctly calculate tube leak using RE 1003B (0.18 – 0.2 gpm)
                         (259 - 288 gpd)

       COMMENT: RE1003B is used because it is the highest value in Step C

       CUE: **None**

                                                                                    _____
                                                                                    SAT   UNSAT

7.   PERFORMANCE STEP: Determine operational limits associated with tube leakage
      ___√___

       STANDARD: RO: Correctly identify applicable TS 3.4.6.2
                   SRO: Correctly identify applicable TS 3.4.6.2 and action a, with any
                        PRESSURE BOUNDARY LEAKAGE, or with primary to secondary
                        leakage not within limit, be in at least HOT STANDBY within 6 hours
                        and in COLD SHUTDOWN with the following 30 hours

       CUE: **What operational limitations are associated with this leakage.** _____
                                                                                    SAT UNSAT

TERMINATING CUES: This JPM is complete (Terminated by candidate)

                                                                                    _____
                                                                                    END TIME

Verification of Completion

Job Performance Measure No. ___A-4___

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation:

Question:_____
_____
_____

Response:_____
_____
_____
_____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Facility: Davis-Besse   **Task No:** 334-004-05-0300

Task Title: State and Counties Notification for an Alert emergency classification

K/A Reference: 2.4.43   (2.8/3.5)   **Job Performance Measure No**: A-7 (RO only)

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:

Plant is shut down. An RCS leak is in progress.

Task Standard:
Make notifications to the State and County agencies during an Emergency Plan activation

Required Materials:

General References:
DB-OP-02110, Emergency Notification
DBEP-012, Emergency Notification Cover Sheet
DBEP-010, Initial Notification Form, filled out for an ALERT based on 2.A.2
Davis-Besse Emergency Plan Telephone Directory (EPTD)

Initiating Cue:

You are the spare Reactor Operator. The Shift Manager declared an Alert classification 3 minutes ago based on RCS leakage. He has directed you to notify Ottawa County, Lucas County, and the State of Ohio using the Initial Notification Form in accordance with Section 6.3 of RA-EP-02110, Emergency Notifications. Section 6.3 steps are complete through 6.3.4.

This is a time critical JPM

Evaluate Note: Provide candidate with procedure DB-OP-02210, Alert Initial Notification Form, and Cover Sheet

Time Critical Task: Yes

Alternate JPM: Yes

Validation Time: 15 minutes

I/S Cues:

Step 3: This is the Ottawa County Sheriff's office, this is the Lucas County Sheriff's
          office.

Step 5: Repeat back Initial Notification Form information provided by candidate.

Step 7: This is the Ohio State Highway Patrol
          Repeat back Initial Notification Form information provided by candidate

INITIAL CONDITIONS:

Plant is shut down. An RCS leak is in progress.

INITIATING CUES:

You are the spare Reactor Operator. The Shift Manager declared an Alert classification 3 minutes ago based on RCS leakage. He has directed you to notify Ottawa County, Lucas County, and the State of Ohio using the Initial Notification Form in accordance with Section 6.3 of RA-EP-02110, Emergency Notifications. Section 6.3 steps are complete through 6.3.4.

This is a time critical JPM

PERFORMANCE INFORMATION

START TIME: _____

---

1. PERFORMANCE STEP: Locates the correct procedure section and step.

    STANDARD: Identifies RA-EP-02110, step 6.3.5 as the next step to perform.

    CUE: **None**

    _____
    Time Starts

    _____
    SAT UNSAT

2. PERFORMANCE STEP: Activate the Davis-Besse 4-way ringdown circuit.
    √

    STANDARD: Picks up receiver for 4-way ringdown phone.

    CUE: **(I/S) This is the Ottawa County Sheriff's office, this is the
    Lucas County Sheriff's office.**
    .

    _____
    SAT UNSAT

3. PERFORMANCE STEP: Recognize State of Ohio is not on the 4-way ringdown circuit.

    STANDARD: Reports State of Ohio did not answer the 4-way ringdown phone.

    CUE: (If asked) **Shift Manager directs you to continue with Notifications in
    accordance with RA-EP-02110.**

    _____
    SAT UNSAT

4. PERFORMANCE STEP: Document notification on Emergency Notification Cover
    Sheet.

    STANDARD: Document agency notified, time of contact and if the 4-way ringdown phone
    was used.

    COMMENT: Time Critical: 12 minutes from step 1 (assumes 3 minutes
    for Shift Manger to fill out forms after declaration).
    Time critical stops when Ottawa and Lucas Counties are
    contacted by candidate as indicated by the time written
    on the Cover Sheet.

    _____
    Time Stops

    CUE: **None.**

    _____
    SAT UNSAT

5.   PERFORMANCE STEP: Transmit information from the Initial Notification Form.
    √

STANDARD: Inform Lucas County and Ottawa County.

CUE: **(I/S)** Repeatback Initial Notification Form information provide by
        candidate.

                                                        _____
                                                        SAT UNSAT

6.   PERFORMANCE STEP: Contact State of Ohio using the Emergency Plan Telephone
    √   Directory.

STANDARD: Locate phone number for State of Ohio Highway Patrol. Number is located in
            the Immediate Notification section of the EPTD. The number is
            614-466-2660.

COMMENT: An outside line is not available on Simulator. The Simulator
          phone will respond with a beeping signal when the State of Ohio
          is dialed.

CUE: **Once the State of Ohio phone is found in the EPTD, have the candidate
          dial x8282.**

                                                        _____
                                                        SAT UNSAT

7.   PERFORMANCE STEP: Contact State of Ohio using the Emergency Plan Telephone
    √   Directory.

STANDARD: Use normal telephone to contact State of Ohio.

CUE: **(I/S) This is the Ohio State Highway Patrol
      Repeat back Initial Notification Form information provided by candidate**

                                                        _____
                                                        SAT UNSAT

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

                                                        _____
                                                        END TIME

Verification of Completion

Job Performance Measure No. ___A-7___

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation:

Question:_____
_____
_____

Response:_____
_____
_____
_____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

Facility: Davis-Besse_____   **Task No:** 334-012-05-0300_____

Task Title:___Security Event Classification and Notification_____

K/A Reference: 2.4.43___(2.8/3.5)_____   **Job Performance Measure No**: _A-5 (SRO only)_

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 100% power
No equipment is out of service

Task Standard:
Perform actions required for a Security Event
Classify emergency plan event in accordance with the Emergency Plan

Required Materials:
SAP numbers for candidiates

General References:
DB-OP-02544, Security Events or Threats
RA-EP-01500, Emergency Classification
Candidate SAP numbers
NRC Security Authentication Code book

Initiating Cue:

You are the Shift Manager

The Security Supervisor reports to the Control Room that the plant has received information
from the Ottawa County Sheriff of a Davis Besse Specific Credible Threat. The Ottawa Sheriff
reports that an outside source is suspected of planning to take control of Davis-Besse in 2 hours
Perform the required actions for this event.

This is a time critical JPM.

Time Critical Task: Yes

Validation Time: 10 minutes

INITIAL CONDITIONS:

The plant is at 100% power
No equipment is out of service

INITIATING CUES:

You are the Shift Manager

The Security Supervisor reports to the Control Room that the plant has received information
from the Ottawa County Sheriff of a Davis Besse Specific Credible Threat. The Ottawa Sheriff
reports that an outside source is suspected of planning to take control of Davis-Besse in 2 hours
Perform the required actions for this event.

This is a time critical JPM.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Locate a copy of DB-OP-02544, Security Events or Threats

   STANDARD: Implements section 4.3 of DB-OP-02544

   COMMENT: Critical to make classification within 15 minutes
   Candidate may go to procedure RA-EP-01500 first

   CUE: **Hand the trainee a copy of DB-OP-02544**

   _____
   SAT UNSAT

2. PERFORMANCE STEP: Classify the event
   √

   STANDARD: Declare an Unusual Event per EAL 7.I.1
   Time critical, 15 minute time limit from security
   Notification of threat   _____
          Time of declaration:

   CUE: **None**

   _____
   SAT UNSAT

3. PERFORMANCE STEP: Make a plant announcement
   √

   STANDARD: Use the Gaitronics to sound the Initiate Emergency Alarm
   and announce the security threat

   CUE: (If asked) **Security concurs with the plant announcement**
   (If asked) **Security is not available to activate CANS (Computerized Notification System)**

   _____
   SAT UNSAT

4. PERFORMANCE STEP: Notify the Emergency Response Organization
    √

    STANDARD: Dial CANS number 2412

    COMMENT: The Simulator phone system will not respond to this number.

    CUE: **The CANS phone number has been dialed**
         CANS answers: *"This is the Remote Activation module.*
         "*Please enter your scenario activation password followed by the pound sign."*

    _____
               SAT UNSAT

5. PERFORMANCE STEP: Notify the Emergency Response Organization
    √

    STANDARD: Enter the scenario activation password (individual's company SAP number)
               followed by the # sign

    COMMENT: JPM Attachment has individual's company SAP numbers.

    CUE: (After SAP number and # are entered)
          "To start a scenario, enter the scenario ID followed by the pound sign, or press pound alone for more options."

    _____
               SAT UNSAT

6. PERFORMANCE STEP: Notify the Emergency Response Organization
    √

    STANDARD: Press 1111 (scenario id number). "#" pressed

    CUE: (After scenario id number entered and # is pressed)
          "The pager event code is (scenario id number entered).
          "Press 1 to change the pager event code.
          "Press 2 to continue"

    _____
               SAT UNSAT

7. PERFROMANCE STEP: Notify the Emergency Response Organization
    √

    STANDARD: Press 2

    CUE: (After 2 is pressed) **"To start the scenario, press 3. To return to the main menu, press pound. To abort activation, Press pound"**

    _____
               SAT UNSAT

8. PERFORMANCE STEP: Notify the Emergency Response Organization
   √

STANDARD: Press 3 to start the scenario

CUE: (After 3 is pressed)
      "The scenario is building.
      To start a scenario, press 1,
      To stop a scenario, press 2,
      To check scenario information, press 3,
      To enter a different scenario activation password, press 4,
      To end this call, press pound,

SAT UNSAT

9. PERFORMANCE STEP: Notify the Emergency Response Organization
   √

STANDARD: Press pound to end the call

CUE: (After # is pressed) **Goodbye**

SAT UNSAT

10. PERFORMANCE STEP: Prepare an Accelerated NRC Call form

STANDARD: Locate and prepare Form DB-0252
               Line 1 - Candidate's name
               Line 2 - Check the first block, Davis-Besse Credible Threat
               Line 3 - Check Unusual Event
               Line 4 - Brief Description

CUE: **None**

SAT UNSAT

12. PERFORMANCE STEP: Make the NRC Accelerated call
     √

     STANDARD: Use the Emergency Notification System to notify the NRC
                        Line 5 – Record time call completed

     COMMENT: The simulator ENS phone will ring the I/S booth when the handset is picked
                        up.

     CUE: (When ENS phone is called, Role play as the NRC)
              "**NRC Operations Headquarters Office.**
              Who is calling?"
              (After the individual identifies himself)
              Repeat back information   _____
                                                                                 SAT UNSAT

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

Verification of Completion

Job Performance Measure No. ___A-5___

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation:

Question: _____
_____
_____

Response: _____
_____
_____
_____

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____