

Administrative
JPM A1
(SRO Only)

Facility: Davis-Besse

Task No: _____

Task Title: Review DB-SC-03023, Off-Site AC Source Line UpK/A Reference: 2.1.29 (SRO 4.0)Job Performance Measure No: A-1 (SRO only)

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:

Simulated Performance ____

Actual Performance XClassroom X

Simulator ____

Plant ____

Read to the examinee:**Initial Conditions:**

The plant is at Mode 1 operation. DB-SC-03023, Off-Site AC Source Line Up was completed to demonstrate availability of off site circuits.

Initiating Cue:

Review DB-SC-03023, Off-Site AC Source Line Up. Notify the SM if you identify any problems.

Task Standard:

Ability to analyze degraded power sources on the status of TS LCOs.
Ability to conduct system lineups including switches and breakers.

Required Materials:

DB-OP-06311,

General References:**Time Critical Task:** No**Validation Time:** 15 minutes ?

INITIAL CONDITIONS:

The plant is at Mode 1 operation. DB-SC-03023, Off-Site AC Source Line Up was completed to demonstrate availability of off site circuits.

INITIATING CUES:

The shift Manager directs you to review DB-SC-03023, Off-Site AC Source Line Up. Notify the SM if you identify any problems.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Reviews completed surveillance Test Procedure DB-SC-03023

STANDARD: Reviews completed surveillance Test Procedure DB-SC-03023.

SAT UNSAT

2. PERFORMANCE STEP: Step 4.1: Bayshore line is connected to the transmission/distribution network, but Attachment 1, Pg 2 of 3 indicates that Bayshore is OOS.

STANDARD: Identifies that step 4.1 was initialed incorrectly, (disagrees with Attachment 1 pg 2 of 3.)

SAT UNSAT

3. PERFORMANCE STEP: Step 5.1.7: Breaker AACC2 and AACD1 are indicated as being racked out on Attachment 1, pg 3 of 3.
____C_____
Step 5.1.7, Step b is incorrectly checked.
Requires entry into TS 3.8.1, Condition A, one Offsite Circuit inoperable

STANDARD: Identifies that block at Step 5.1.7. was incorrectly initialed, (disagrees with Attachment 1 pg 3 of 3 lineup.)
Enters into TS 3.8.1, Condition A

SAT UNSAT

4. PERFORMANCE STEP: Step 5.1.11: Both Reserve Source Selector Switches are selected to the same startup transformer.
____C_____
Requires entry into TS 3.8.1, Condition A, one Offsite Circuit inoperable.

STANDARD: Identifies that Step 5.1.11 Block b is checked but this condition does not agree with Steps 4.3 and 4.4. OR Attachment 1, pg 3 of 3.
Enters into TS 3.8.1, Condition A.

SAT UNSAT

5. PERFORMANCE STEP: With both Step 5.1.7 AND 5.1.11 conditions not being met,
____C____ this would require entry into TS 3.8.1, Condition C, two Offsite
Circuits Inoperable.

STANDARD: Recognizes that with Steps 5.1.7 AND 5.1.11 NOT being met, must enter
into TS 3.8.1, Condition C.

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. Admin A-1 (SRO)

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: _____

Administrative
JPM A2
(RO Only)

Facility: Davis-Besse

Task No:

Task Title: Perform DB-OP-03006, Miscellaneous Shift CheckK/A Reference: 2.1.31 (4.6) (RO)Job Performance Measure No: A-2

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The plant is in Mode 1. The RO performing DB-OP-03006 was called away and was unable to complete DB-OP-03006, Attachment 1.

Initiating Cue:

You are to perform DB-OP-03006, Attachment 1, Miscellaneous Instrument Shift Check and notify the SM if you identify any problems.

Task Standard:

Ability to locate control room switches, contols, and indications and to determine that they correctly reflect the desired plant lineup.

Required Materials:

DB-OP-03006, Miscellaneous Instrument Shift Check.

Technical Specifications

Core Operator Limits Report

General References:

DB-OP-03006, Miscellaneous Instrument Shift Check

Time Critical Task: No**Validation Time:** 15 minutes ?

INITIAL CONDITIONS:

The plant is in Mode 1. The RO performing DB-OP-03006 was called away and was unable to complete DB-OP-03006, Attachment 1.

INITIATING CUES:

You are to complete DB-OP-03006, Attachment 1, Miscellaneous Instrument Shift Check and notify the SM if you identify any problems.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Completes DB-OP-03006, Attachment 1, pages 5 – 8.

STANDARD: Collects information from panels as req'd by DB-OP-03006, Attachment 1.

SAT UNSAT

2. PERFORMANCE STEP: At RPS Cabinets, identifies that RCS Flow loop comparison on
____C____ RPS Channel #3 exceeds the 2 mpph criteria.

STANDARD: Should identify that maximum difference in RPS Channel #3 RCS loop flow comparison exceeds 2 mpph criteria. Notifies SRO

COMMENT: Critical step due to TS 3.3.1 entry.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

3. PERFORMANCE STEP: At SFAS Cabinets, identifies that RCS pressure exceeds the
____C____ >75 psid criteria between Channels #2 and #4.

STANDARD: Should identify that maximum pressure differences between SFAS channels #2 & #4 has been exceeded. Notifies SRO.

COMMENT: Critical step due to TS 3.3.5 entry.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

4. PERFORMANCE STEP: At ARTS Channel #1, identifies that AC power light is off.
____C____

STANDARD: Identifies ART Channel #1 AC power light is off.

COMMENT: Critical step due to entry into TS 3.3.16.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. Admin A-2 (RO)

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: _____

Administrative
JPM A2
(SRO Only)

Facility: Davis-Besse

Task No:

Task Title: Review DB-OP-03006, Miscellaneous Shift CheckK/A Reference: 2.1.31 (4.3) (SRO)Job Performance Measure No: A-2

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The plant is in Mode 1.

Initiating Cue:

You are to review DB-OP-03006, Attachment 1, Miscellaneous Instrument Shift Check and notify the SM if you identify any problems.

Determine if there are any Technical Specification entry requirements and if so, what are the requirements.

Task Standard:

Ability to locate control room switches, contols, and indications and to determine that they correctly reflect the desired plant lineup.

Required Materials:

DB-OP-03006, Miscellaneous Instrument Shift Check.

Technical SpecificationsCore Operator Limits ReportCtmt Normal Sump Log ? or give cue.**General References:**

DB-OP-03006, Miscellaneous Instrument Shift Check

Time Critical Task: No**Validation Time:** 15 minutes ?

INITIAL CONDITIONS:

The plant is in Mode 1.

INITIATING CUES:

You are to review DB-OP-03006, Attachment 1, Miscellaneous Instrument Shift Check and notify the SM if you identify any problems.

Determine if there are any Technical Specification entry requirements and if so, what are the requirements.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Reviews and logs information required by DB-OP-03006.

STANDARD: Reviews and collects information from panels as req'd by DB-OP-03006, Attachment 1.

SAT UNSAT

2. PERFORMANCE STEP: Step 4.2, BWST Level, calculated Maximum Difference should be 2.5 feet not 2.0 feet
____C____
Should declare LI1525B inoperable and enter TS 3.3.5, Cond. A and place channel in Trip in 1 hour. (TS 3.3.17 is also applicable but not dominant)

STANDARD: Should identify that maximum difference in logged should be 2.5 feet not 2.0 feet. Step NOT met, (YES incorrectly circled). Should declare LI1525B inoperable and enter TS 3.3.5 and trip BWST level indicator LI1525B within 1 hour. May refer to TS 3.3.17 but not critical.

COMMENT: Critical step is to enter TS 3.3.5 and place LI1525B in trip within 1 hour.

CUE: As SM, acknowledge error and continue with surveillance.

SAT UNSAT

3. PERFORMANCE STEP: Step 4.3, CTMT to Annulus Diff Pressure, Shift Manager should be notified of degraded condition as required by Note a.

STANDARD: Notifies Shift Manager that CTMT to Annulus Diff Pressure needs to be addressed.

COMMENT: Not critical, no TS entry.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

4. PERFORMANCE STEP: Step 4.9, CST Level, levels should be added together.

STANDARD: Identifies that Step 4.9, CST Levels were not added together. Notifies shift manager of error.

COMMENT: Not critical since no TS entry.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

5. PERFORMANCE STEP: Step 4.21, AFW Pump Controllers, Condition Met, YES not circled.

STANDARD: Informs Shift Manager that YES should have been circled on Step 4.21.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

6. PERFORMANCE STEP: Step 4.35, Missed RCS Loop flow data entry.

STANDARD: Identifies that Step 4.35 data entry is missing.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

7. PERFORMANCE STEP: Step 4.34, OTSG Conditions:
 ____C____
 SG #1 and SG #2 Max levels exceed calculated value.
 Identifies that SG #1 and SG#2 levels should read <96% Max value.
 Enters TS 3.7.18, Condition A.
 YES should not have been circled.

STANDARD: Identifies that SG#1 and SG#2 calculated levels are >96%.
 Enters TS 3.7.18, Condition A and restore conditions within 15 minutes.

CUE: As SRO, acknowledge error and continue with surveillance.

SAT UNSAT

8. PERFORMANCE STEP: Step 4.52, SFRCS Input Panel Lights NOT all ON.
____C____ Enters TS 3.3.11 to trip SFRCS Input channel within 1 hr.

STANDARD: Identifies that not all SFRCS Input Panel Lights are on.
Requires review of TS 3.3.11. Must place channel in trip in 1 hr.

COMMENT: Critical step is to enter into TS 3.3.11, Condition A and trip affected channel
within 1 hr.

CUE: (If asked), All 5 lights are OFF on SFRCS Cabinet 2.

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. Admin A-2 (RO)

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: _____

Administrative
JPM A3

Facility: Davis-Besse **Task No:** _____

Task Title: Review a safety tagout for CCW Pump 1 with eSOMS unavailable

K/A Reference: 2.2.13 (4.1/4.3) **Job Performance Measure No:** A-3

Examinee: _____ **NRC Examiner:** _____

Date: _____ **Alternate Path?** No

Method of testing:

Simulated Performance _____ Actual Performance X

Classroom X Simulator X Plant _____

Read to the examinee:

Initial Conditions:

The plant is currently operating at 100%.

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

Component Cooling Water Pump #1 has a leak on the pump's seal that requires replacement.

Initiating Cue:

The Shift Manager directs you to review a safety clearance for Component Cooling Water Pump 1 for seal replacement and determine if the clearance is acceptable.

Task Standard:

Review a safety tagout and correct errors

Required Materials:

NOP-OP-1001, Clearance/Tagging Program

NOBP-OP-1001, Clearance Program

Operations Schematic, OS-21 (Component Cooling Water System)

Valve Location Book

General References:

Evaluator Note: Provide candidate with CCW Pump #1 Clearance, (copy of Cover Sheet, Index Sheet, tagout sheet, and OS-21.)

Time Critical Task: No

Validation Time: 40 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.
Component Cooling Water Pump 1 has a leak on the pump's seal that requires replacement.

INITIATING CUES:

The Shift Manager directs you to review a safety clearance for CCW Pump #1 for seal replacement and determine if the clearance is acceptable.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Provide the following to the applicant:
NOP-OP-1001, Clearance/Tagging Program
Clearance Package for CCW Pump #1

STANDARD: Receives and reviews provided material.

COMMENT: JPM sequence is not required for this JPM

2. PERFORMANCE STEP: Review Manual Clearance Tag List, NOP-OP-1001-9
C

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 113 (correct breaker is AC 113) (CRITICAL)
 - *2. Pump discharge valve CCW 34 (correct valve is CCW 32) (CRITICAL)
 - *3. Breaker was tagged out after the suction and discharge valves were closed. (CRITICAL)
 - 4. CCW 1, suction valve, sequenced before CCW 17, discharge valve, is closed. (NON-critical)
- B. The candidate corrects the tagging list by:
- *1. Changing AD 113 to AC 113 (in 585' B HVSG Rm) (CRITICAL)
 - *2. Changing CCW 34 to CCW 32 (CRITICAL)
 - 3. Changing Placement Configuration to hang
 - a. AD 113 second, (CRITICAL)
 - b. CCW 32 third after breaker is tagged (CRITICAL)
 - c. CCW 1 fourth, (NON-critical)
 - d. Vents and drains last. (CRITICAL)

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

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

SAT UNSAT

3. 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. Admin 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: _____

Administrative
JPM A4

Facility: Davis-Besse Task No: _____

Task Title: Don and Remove Class 2 Protective Clothing for Task in Contaminated Area

K/A Reference: 2.3.12 (3.2/3.7) Job Performance Measure No: A-4

Examinee: _____ NRC Examiner: _____

Date: _____ Alternate Path? No

Method of testing:

Simulated Performance ____ Actual Performance X

Classroom X Simulator ____ Plant ____ **Mockup X**

Read to the examinee:

Initial Conditions:

You are an extra operator assigned to the LLRT team during an outage.
You have received 50 mrem exposure for the day on RWP 2009-0010, Task 2.

Initiating Cue:

You are requested to: 1. calculate your stay time for this job and, 2. enter into a high radiation and contaminated area to unlock and close valve MU16 in accordance with RWP 09-0010, Task 2. Notify the control room via the Gaitronics that the valve has been repositioned.

Task Standard:

Knowledge of radiological safety principles.
Ability to calculate a stay time.
Ability to properly don and remove protective clothing without spreading contamination.

Required Materials:

RWP: Stipulates that Class 2 protective clothing is specified for job: 1 pair coveralls, glove liners, rubber gloves, shoe covers, rubber footwear and hood. Clothes you are presently wearing will act as modesty garments. Dosimetry has already been logged in for you and will be ready for you to pickup at access control point. Maximum allowed daily dose for this RWP is 150 mrem.

Radiation Map of the Mockup area: A High Radiation Area and Contamination area exists in the vicinity of the valve to be operated. HRA reads 100 mrem/hr.

General References:

Time Critical Task: No

Validation Time: 20 minutes

INITIAL CONDITIONS:

You are an extra operator assigned to the LLRT team during an outage.
You have received 50 mrem exposure today on RWP 2009-0010, Task 2.

INITIATING CUES:

You are requested to:

- calculate your stay time for this job and,
- enter into a high radiation and contaminated area to unlock and close valve MU16 in accordance with RWP 09-0010, Task 2.
- Notify the control room via the Gaitronics that the valve has been repositioned.

PERFORMANCE INFORMATION

START TIME: _____

This JPM will be performed in the radiological mockup room in the training building.

1. PERFORMANCE STEP: Reviews RWP 09-0010.
Collects protective clothing required by RWP 09-0010, Task 2.

STANDARD: Obtains: 1 pair of coveralls, 1 set of glove liners,
1 set of rubber gloves 1 pair of shoe covers
1 pair of rubber footwear 1 head cover (hood)

COMMENT: Applicant may compute stay time prior to donning clothing
Applicant may request dosimetry prior to donning clothing.

SAT UNSAT

2. PERFORMANCE STEP: Inspects articles looking for rips, cuts, and integrity prior to donning protective clothing.

STANDARD: Inspects protective clothing for integrity prior to donning.

SAT UNSAT

3. PERFORMANCE STEP: Dons protective clothing in following order:
- | | |
|--------------------|------------------|
| 1. Shoe covers | 1. Glove liners |
| 2. Coveralls | |
| 3. Rubber footwear | 3. Rubber gloves |
| 4. Hood | 5. Bump Hat |

STANDARD: Dons protective clothing in order.

When complete: Tops of shoe covers are inside coverall pant legs.
Arms are inserted into sleeves with glove liners inside sleeves.
Zipper on coveralls is zipped all the way up.
Ends of rubber gloves are over coveralls.
Hood is over coveralls.
Bump hat covering hood.

COMMENT: Suiting up is not critical! What's critical is undressing!
Must done items marked 1 prior to donning other items
Must done item 2 prior to donning items marked 3.
After items 1 & 2 are complete, Items 3 and 4 can be done in any order.

SAT UNSAT

4. PERFORMANCE STEP: Computes stay time.

 C

STANDARD: Computes stay time as follows:

150 mrem (allowed by RWP) – 50 mrem (already rec'd today) = 100 mrem

100 mrem / 100 mrem/hr (HRA from Rad Map) = 1 hour stay time.

SAT UNSAT

5. PERFORMANCE STEP: Obtains dosimetry from access control point.

 C

Answers RP questions.

STANDARD: Applicant requests dosimetry from access control point.

Answers RP Questions.

CUE: As access control point, ask the following questions:

What RWP are you on? (Answer: RWP 09-0010, Task 2)

What is your dose limit for this trip? (Answer: already rec'd 50 mr so far today, so can only receive 100 mr additional.)

(If not previously provided) What is your stay time? (Answer: 1 hour – see above.)

Then provide dosimetry and state:

CUE: “This dosimetry has already been logged in for you on RWP 09-0010, Task 2.”

SAT UNSAT

6. PERFORMANCE STEP: Enters into Radiologically Protected Area (RPA) with locked

 C

valve key and performs assigned task.

STANDARD: Applicant enters RPA, with locked valve key and locates, unlocks and closes valve MU16. Calls Control Room using Gaitronics and informs control room that valve is closed.

CUE: As control room operator, repeat “Understand MU16 is closed. Standby.”

Where would you standby at? (Ans: Low dose area across from Gaitronics.)

We will employ a 45 minute time compression. “(Applicants name) pick up line 5.” The control room now asks that MU16 be locked open.

COMMENT: Critical tasks are:

- MU16 is unlocked and closed and left unlocked.
- Knows location of low dose waiting area.

SAT UNSAT

7. PERFORMANCE STEP: Opens and locks MU16
 C

STANDARD: Opens and locks MU16 using good radiological practices.
Calls Control Room to inform CR that MU16 is now closed and locked.

COMMENT: Critical task is to open and lock MU16.

CUE: As control room operator, repeat, "MU16 is locked open. Exit the area."

Examiner NOTE: Do NOT cross the contamination area, instead, walk out the path you walked into the HRA. Go down the hall and come in the door to the desuit area.

SAT UNSAT

8. PERFORMANCE STEP: Applicant desuits in the following order:

 C * Places locked valve key in contaminated area near step off pad.
 + Places dosimetry on step off pad.
 1. Removes Rubber footwear
 2. Removes Rubber gloves

STANDARD: Places locked valve key in contaminated area
Removes rubber footwear then removes rubber gloves.

NOTE: Critical Step: Removes rubber outer ware prior to removing other clothing.

SAT UNSAT

9. PERFORMANCE STEP: Applicant desuits in following order:

3. Removes bump hat
4. Removes hood
5. Removes dosimetry from coveralls prior to removing coveralls.
6. Removes coveralls
7. Removes cotton glove liners

STANDARD: Removes clothing in order being careful not to spread contamination.
Applicants may "unroll" protective clothing handling clothing from inside.
Removed clothing is placed carefully in container provided at RPA.
Places dosimetry in clean area (on step off pad is acceptable)

COMMENT: **See attachment 1 for undressing sequence.**

SAT UNSAT

10. PERFORMANCE STEP: No Spread of Contamination into Clean areas.

 C

STANDARD: After removing outer protective clothing, examiner to determine if contamination was spread outside the contaminated area by turning on room black light and checking for spread of contamination outside controlled area and on individual. (Use hand held black light to check applicant's face and hands.)

COMMENT: Critical step: NOT spreading contamination into clean area (including step off pad.)

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. **Admin A-3**

Examinee's Name: _____

Examiner's Name: _____

Date Performed: _____

Facility Evaluator: _____

Number of Attempts: _____

Time to Complete: _____

Question Documentation: _____

Question: _____

Response: _____

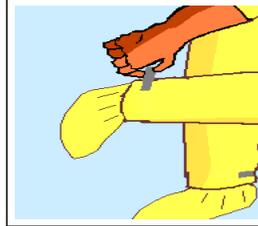
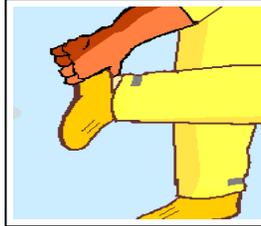
Result: Satisfactory/Unsatisfactory

Examiner's signature and date: _____

PROTECTIVE CLOTHING REMOVAL

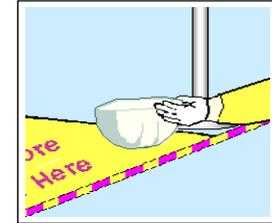
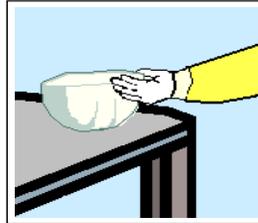
Step 1

- Rubber Shoe Covers
- PAW's from ankles/wrists
- Rubber Gloves



Step 2

- Remove personal Hard Hat (If wearing one)
- Place on clean table or Step Off Pad



Step 3

- Remove Hood by handling inside only.



Step 4

- Unzip Coveralls
- Transfer EAD to lanyard.



Step 5

- Remove Coveralls
- Do not touch outside of coveralls with cotton liners.



Step 6

- Remove Shoe Covers
- Step on Step Off Pad
- Liners to trash
- Only lean on stanchion with cotton liners.



Administrative
JPM A5
(RO Only)

Facility: Davis-Besse

Task No: _____

Task Title: Event NotificationK/A Reference: 2.4.39 (RO 3.9)Job Performance Measure No: A-5

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The plant tripped from 100% power due to Main Turbine high vibrations.

An equipment operator reports that the turbine has been damaged and blading has been ejected through the turbine casing. An Alert was declared due to EAL 7.F.2.

Initiating Cue:

The Shift Manager has requested you to make plant announcements in accordance with RA-EP-01700, Alert.

Task Standard:

Notify outside agencies in accordance with the Emergency Plan.
Knowledge of Emergency action level thresholds and classifications.

Required Materials:

Applicant SAP numbers

General References:

RA-EP-01700, Emergency Plan Implementing Procedure

Emergency Plan Telephone Directory

Time Critical Task: No**Validation Time:** 12 minutes

INITIAL CONDITIONS:

The plant tripped from 100% power due to Main Turbine high vibrations.

An equipment operator reports that the turbine has been damaged and blading has been ejected through the turbine casing. An Alert was declared due to EAL 7.F.2.

INITIATING CUES:

The Shift Manager has requested you to make plant announcements in accordance with RA-EP-01700, Alert.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Locates the correct procedure.

STANDARD: Locates and obtains RA-EP-01700, Alert.

SAT UNSAT

2. PERFORMANCE STEP: Sounds the appropriate station alarm.

C

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

CUE: **"EMER" button has been pressed.
The alarm has sounded and has stopped.**

SAT UNSAT

3. PERFORMANCE STEP: Announce the classification to the Station twice.

C

STANDARD: The following plant announcement is made using the Gai-Tronics:

"ATTENTION ALL PERSONNEL; ATTENTION ALL PERSONNEL; AN ALERT HAS BEEN DECLARED. ALL MEMBERS OF THE ONSITE EMERGENCY RESPONSE ORGANIZATION REPORT TO YOUR DESIGNATED EMERGENCY RESPONSE FACILITIES. ALL NONESSENTIAL PERSONNEL GO TO THE TRAINING CENTER EMERGENCY ASSEMBLY AREA AND STANDBY. THE REASON FOR THE ALERT IS: _____." (This announcement is made twice)

COMMENT: Applicant is expected to announce that a turbine failure as a given reason for the emergency declaration.

CUE: **The announcement has been made.**

SAT UNSAT

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

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: _____

Administrative
JPM A5
(SRO Only)

Facility: Davis-Besse

Task No: _____

Task Title: Event Classification and NotificationK/A Reference: 2.4.30 (SRO 4.1)Job Performance Measure No: A-5

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The plant tripped from 100% power due to Main Turbine high vibrations.

An equipment operator reports that the turbine has been damaged and blading has been ejected through the turbine casing.

Initiating Cue:

Determine if emergency action levels have been exceeded and assume the duties of the Emergency Director if required. This is a time critical task.

Task Standard:Notify outside agencies in accordance with the Emergency Plan.
Knowledge of Emergency action level thresholds and classifications.**Required Materials:**

Applicant SAP numbers

General References:RA-EP-01500, Emergency Classification
RA-EP-01700, Emergency Plan Implementing Procedure
Applicant SAP numbers
NRC Security Authentication Code book
Emergency Plan Telephone Directory**Time Critical Task:** Yes**Validation Time:** 15 minutes ?

INITIAL CONDITIONS:

The plant tripped from 100% power due to Main Turbine high vibrations.

An equipment operator reports that the turbine has been damaged and blading has been ejected through the turbine casing.

INITIATING CUES:

Determine if emergency action levels have been exceeded and assume the duties of the Emergency Director if required. This is a time critical task.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Locate the correct procedure.

STANDARD: Locate and obtain RA-EP-01500, Emergency Classification.

COMMENTS: **Time:** _____

CUE: This is a time critical JPM. The clock starts now.

SAT UNSAT

2. PERFORMANCE STEP: Classify the event.

____C____

STANDARD: EALs are reviewed. Event is classified as an ALERT per EAL 7.F.2.

COMMENT: Event must be classified within 15 minutes.

CUE: Time: _____

SAT UNSAT

3. PERFORMANCE STEP: Locate the correct procedure.

STANDARD: Locate and obtain RA-EP-01700, Alert.

SAT UNSAT

4. PERFORMANCE STEP: Sound the appropriate station alarm.

____C____

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

**CUE: "EMER" button has been pressed.
The alarm has sounded and has stopped.**

SAT UNSAT

5. PERFORMANCE STEP: Announce the classification to the Station.
____C____

STANDARD: The following plant announcement is made using the Gai-Tronics:

“ATTENTION ALL PERSONNEL; ATTENTION ALL PERSONNEL; AN ALERT HAS BEEN DECLARED. ALL MEMBERS OF THE ONSITE EMERGENCY RESPONSE ORGANIZATION REPORT TO YOUR DESIGNATED EMERGENCY RESPONSE FACILITIES. ALL NONESSENTIAL PERSONNEL GO TO THE TRAINING CENTER EMERGENCY ASSEMBLY AREA AND STANDBY. THE REASON FOR THE ALERT IS: _____.” (This announcement is made twice)

COMMENT: Applicant is expected to announce that a turbine failure as a given reason for the emergency declaration.

CUE: The announcement has been made.

SAT UNSAT

6. PERFORMANCE STEP: Locate the correct procedure for emergency notification.

STANDARD: Locates and obtains RA-EP-02110, Emergency Notification Procedure.

SAT UNSAT

7. PERFORMANCE STEP: Notify the Emergency Response Organization
____C____

STANDARD: Calls Security to activate CANS.

CUE: Security is NOT available to activate CANS.

SAT UNSAT

8. PERFORMANCE STEP: Obtain CANS access number from Emergency Plan
____C____ Telephone Directory and dials number

STANDARD: Locate Immediate Notification Numbers tab in directory.
Locate touch tone phone and simulate number entry, 9-1-866-458-4031.

CUE: (I/S CUE) "This is the Remote Activation module. Please enter your company id number followed by the pound sign."

SAT UNSAT

9. PERFORMANCE STEP: Enter 5247#
____C____

STANDARD: Enters 5247# on the telephone key pad.

CUE: *"You entered (number entered), is that correct?
Answer 9 for yes or 6 for no."*

If 6 is pressed, repeat CUE in step 8.

If 9 is pressed, *"Please enter your scenario activation password followed
by the # sign."*

SAT UNSAT

10. PERFORMANCE STEP: Enter individual's SAP number
____C____

STANDARD: Code entered. (See Attachment 1 for applicant's SAP number.)

CUE: *(I/S CUE) "You entered (number entered), is that correct?
Answer 9 for yes or 6 for no."*

If 6 is pressed, repeat CUE in step 9.

If 9 is pressed, *"To start a scenario, enter the scenario ID followed by the #
sign or press # alone for more options."*

SAT UNSAT

11. PERFORMANCE STEP: Enter 2222# for an Alert.
____C____

STANDARD: 2222# entered

CUE: *(I/S CUE) "You entered (number entered), is that correct?
Answer 9 for yes or 6 for no."*

If 6 is pressed, repeat CUE in step 10,

If 9 is pressed, *"To listen to the current scenario, Press 1; to re-record the
scenario message, press 2; to start the scenario, press 3; to return to the
main menu, press #"*

SAT UNSAT

12. PERFORMANCE STEP: Enter 3
_____C_____

STANDARD: Enter 3 to build scenario

CUE: (I/S CUE) "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 #."

SAT UNSAT

13. PERFORMANCE STEP: Enter #

STANDARD: # entered to end call

CUE: (I/S CUE) "Goodbye."

SAT UNSAT

14. PERFORMANCE STEP: Make Offsite Notifications.
Complete Initial Notification Form DBEP-010, Att 2.

STANDARD: Completes DBEP-010, Attachment 2.

COMMENTS: Critical entries on DBEP-010 are:
Event classification: Alert
?????????

SAT UNSAT

15. PERFORMANCE STEP: Activate Davis-Besse 4-Way Ringdown Circuit
_____C_____

STANDARD: White 4-Way Ringdown phone picked up in the Control Room

COMMENT: Second Time-Critical Clock (15 minutes to notify offsite agencies and provide PARs) stops when the four-way ringdown phone is picked up.

Second Clock stop time _____

CUE: Answer as Ottawa County Sheriff's Dispatcher, Lucas County Sheriff's Dispatcher and Ohio Highway Patrol.

SAT UNSAT

16. PERFORMANCE STEP: Informs Offsite of event at site.

STANDARD: Describes event to Offsite personnel from information on DBEP-10 sheet.

CUE: Repeat back information from the Initial Notification Form

SAT UNSAT

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

END TIME

Applicant Name

SAP Number

NEED TO FILL THIS IN FOR SRO APPLICANTS

Verification of Completion

Job Performance Measure No. Admin A-5 (SRO)

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: _____

**Control Room
JPM A**

Facility: Davis-Besse

Task No:

Task Title: Exercise Group 5 Control RodsK/A Reference: 014 A4-01 (3.3/3.1)Job Performance Measure No: A

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? No**Method of testing:**

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The plant is operating at 50% power.

Initiating Cue:

The Command SRO directs you to exercise Group 5 control rods in accordance with DB-SC-03272, Section 4.2, "Exercise Regulating Rods Groups 5 – 7," for control rod exercising.

Task Standard:Operate Control Rods manually while the reactor is at power (Mode 1).
Ability to manually operate and/or monitor in the control room, rod selection control.**Required Materials:**

None

General References:

DB-OP-06402, "CRD Operating Procedure" with Sections 3.1 and 3.2 signed off.

Time Critical Task: No**Validation Time:** 25 minutes**Simulator Setup:**

Reactor power is at any power level 50%.

INITIAL CONDITIONS:

The plant is operating at 50% power.

INITIATING CUES:

The Command SRO directs you to exercise Group 5 control rods in accordance with DB-SC-03272, Section 4.2, "Exercise Regulating Rods Groups 5 – 7," for control rod exercising.

PERFORMANCE INFORMATION

START TIME: _____

1. PERFORMANCE STEP: Set the Rod Control Panel Group Meter Switch to "R"

STANDARD: At Diamond Panel, applicant sets the Group Meter Switch to "R."

NOTE: May be in "R" position already.

SAT UNSAT

2. PERFORMANCE STEP: On the Rod Control verify the following are selected

C_____
MANUAL Mode
GROUP Mode
SEQ BYPASS Mode

STANDARD: At the Diamond panel, applicant places:
Rod Control in MANUAL
Rod Control in GROUP
Rod Control in SEQ BYPASS.

NOTE: May place Rx Demand Station to HAND.

SAT UNSAT

3. PERFORMANCE STEP: Record the position of Group 5 from Rod Control Panel

STANDARD: At Rod Position Indicator, applicant verifies Group 5 is at 100%
Record Group 5 position on Attachment 1.

SAT UNSAT

4. PERFORMANCE STEP: Place Group Select Switch to GROUP 5 position.

C_____
Verifies the GROUP 5 ON CONT Lamp is ON on Rod Position
Indication panel.
Verifies the CRDM PI Panel Group 5 CONTROL-ON lamps are
ON.

STANDARD: On CRD Diamond Panel, applicant places Group Select Switch to GROUP 5
position. Verifies Group 5 lights lit on Rod Position Indication Panel.

SAT UNSAT

5. PERFORMANCE STEP: Insert Group 5 at least 3%.

 C

STANDARD: On CRD Diamond Panel, applicant takes rod motion switch to INSERT position until:

Rod Position Indication is less than 97% AND
Rod Group 5 OUT LIMIT indication is OFF.

SAT UNSAT

6. PERFORMANCE STEP: Record individual Group 5 rod positions on Attachment 1.

STANDARD: Records Group 5 rod positions on Attachment 1.

SAT UNSAT

7. PERFORMANCE STEP: Withdraw Group 5 to the OUT LIMIT.

STANDARD: At Diamond Panel, applicant takes rod motion switch to WITHDRAW position until the 100 PERCENT lamps for all Group 5 rods are ON.

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. A

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: _____

**Control Room
JPM B**

Facility: Davis-Besse

Task No:

Task Title: Respond to Core Flood Tank #1 Low Level AlarmK/A Reference: 006 A1-13 (3.5/3.7)Job Performance Measure No: B

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? Yes**Method of testing:**

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The Reactor is in Mode 1, normal operations.

Initiating Cues:The Unit Supervisor directs you to respond to Annunciator 3-1-F.
An NLO is available to assist.**Task Standard:**Ability to predict and/or monitor changes in Core Flood Tank Level.
Reestablish Core Flood Tank to Technical Specification requirements.**Required Materials:**

None

General References:DB-OP-02003, "ECCS Alarm Panel 3 Annunciator Procedure"
DB-OP-06014, "Core Flooding Operating Procedure"**Simulator Setup:****Time Critical Task:** No**Validation Time:** 25 minutes

Simulator Setup:

^ Events to fill core flood 1

^

^b This lower level

irf bft1a (1) 12.4

^

This will lower pressure

irf bft1d (2) 560

^

^ open hp 26

irf bf26 (3) 1.0

^

^ open hp 60

irf bf60 (4) 1.0

^

^ open hp 140 for ball valve 41

irf bfn0 (5) 1.0

^ Throttle hp28

irf bf28 (6) 1.0

INITIAL CONDITIONS:

The Reactor is in Mode 1, normal operations.

INITIATING CUES:

The Unit Supervisor directs you to respond to Annunciator 3-1-F.
An NLO is available to assist.

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: Verifies Prerequisites:
Verifies the HPI Pump 1 is in standby.
Verifies a CCW pump is running for HPI pump 1.
Verifies a pre-job briefing has been conducted.

STANDARD: Verifies CCW Pump is in operation.

CUE: If asked: HPI Pump is in Standby lineup for Mode 1 operations. A pre-job brief for this evolution has been completed.

CUE: As Shift Manager, I will refer to Tech Spec 3.5.1., for CFT.

SAT UNSAT

2. PERFORMANCE STEP: Informs Unit Supervisor that next steps will render HPI Pump #1 inoperable. Refers Command SRO to ITS 3.5.2

STANDARD: Command SRO informed that HPI Pump #1 will become inop and is referred to ITS 3.5.2

CUE: As Command SRO, I understand HPI Pump #1 will be inoperable. I'll refer to Tech Spec 3.5.2.

SAT UNSAT

3. PERFORMANCE STEP: Has NLO unlock and open HP 26, HPI pump #1 Flow Test Isolation Valve.

STANDARD: Calls NLO to have HP26 unlocked and open using 3-part communications.

NOTE: Have applicant call the booth for any NLO operations using Gaitronics Line 4 if there are other applicants in the simulator.

SAT UNSAT

8. PERFORMANCE STEP: When CFT 1 level approaches the desired level, then
 C Close HP28, HPI to CFT Fill AND
Close HP41, HPI to Core Flood Tanks Common Fill.

STANDARD: When CFT #1 indicates between 12.7 to 13.2 feet as indicated on Control Room Level Indicators, LI CF3B2 or LI CF3B1, has NLO Close HP28 and HP41. (May fill until Annunciator 3-1-F clears.)

NOTE: Have applicant call the booth for any NLO operations using Gaitronics Line 4.

NOTE: Critical to fill level to between 12.6 and 13.3 feet (ITS 3.5.1).

NOTE: If applicant gets a CFT high pressure alarm during filling of the CST, the applicant would be expected to return CFT pressure to within Tech Spec limits.

SAT UNSAT

9. PERFORMANCE STEP: Close CF1544, using HIS1544
 C

STANDARD: Closes CF1544 using HIS1544. Green light ON, Red light OFF.

SAT UNSAT

10. PERFORMANCE STEP: Close HP60, HPI to CFT #1 Fill Valve.

STANDARD: Has NLO Close HP60 using 3-part communications.

NOTE: Have applicant call the booth for any NLO operations using Gaitronics Line 4.

SAT UNSAT

11. PERFORMANCE STEP: Since CFT #1 is the only tank being filled, stop HPI Pump
 C #1 using HIS 1524.

STANDARD: Stops HPI Pump #1 using HIS1524. Red light OFF, Green light ON.

SAT UNSAT

12. PERFORMANCE STEP: Restore from Filling Operations:
Verifies that HPI Pump #1 is stopped
Has NLO Drain residual water from CF12 & CF1544 connection
After drain complete, NLO closes CF12 & CF1544.

STANDARD: Contacts NLO to drain residual water from CF12 & CF1544 using 3-part communications.

SAT UNSAT

- 13 PERFORMANCE STEP: Check HPI Pressure

STANDARD: Calls up Computer Point P465

SAT UNSAT

14. PERFORMANCE STEP: Close and lock HP 26, HPI Pump #1 Flow Test Isolation.

STANDARD: Contacts NLO to close and lock HP26 valve using 3-party communications.

SAT UNSAT

15. PERFORMANCE STEP: Notify Shift Manager that Fill Lineup has been restored and to refer to TS 3.5.1.

STANDARD: Notifies Command SRO that Fill Lineup has been restored. Refers Command SRO to TS 3.5.1

CUE: As Command SRO, I will review TS 3.5.1

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. B

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: _____

**Control Room
JPM C**

Facility: Davis-Besse

Task No:

Task Title: Respond to Low RCS PressureK/A Reference: 010 A2-02 (3.9/3.9)Job Performance Measure No: C

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? Yes**Method of testing:**

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The Reactor is at 50%.

Initiating Cues:

The Shift Manager directs you to respond to Annunciator 4-4-C, "Hot Leg Pressure Low."

Task Standard:Control Pressurizer Pressure in manual mode (using heaters or spray manually).
Mitigate consequences of spray valve failure (failed open).**Required Materials:**

None

General References:

DB-OP-02513, "Pressurizer Pressure Abnormal Operation"

Time Critical Task: No**Validation Time:** 5 minutes ?

Simulator Setup:

Have pressurizer spray valve RC-2 stuck open (throttled) and pressurizer spray block valve RC-10 stuck open such that RCS pressure lowers slowly with all pzs heaters on. Annunciator 4-4-C is in.

Delta Tc is in HAND.

^ nrcscenariojpm3.txt

^

^ RCS spray block failed open

imf hv03b

^

^ RCS spray valve fail open

imf hv00e 0.353

^

^ manual isolation rc 50 throttled

irf hh20 (1) 0.6

Simulator should be frozen until candidate is ready.

INITIAL CONDITIONS:

The Reactor is at ~72% power.

INITIATING CUES:

The Shift Manager directs you to respond to Annunciator 4-4-C, "Hot Leg Pressure Low."

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: Verify all Pressurizer heater banks are energized.
 C

STANDARD: At C5705, applicant energizes all pressurizer heaters.

NOTE: May refer to DB-OP-02004, for annunciator actions.

SAT UNSAT

2. PERFORMANCE STEP: Verify RC 2, SPRAY is closed.

STANDARD: At C5705, applicant attempts to close RC 2 SPRAY valve. Valve will not move.

NOTE: RC 2 SPRAY valve is shown without indication.

CUE: As Shift Manager, acknowledge that RC 2 Spray valve will not move.

SAT UNSAT

NOTE: Start Alternate path here.

Applicant should transition to DB-OP-02513, "Pressurizer Pressure Abnormal Operation."

3. PERFORMANCE STEP: Close RC 10, PRESSURIZER SPRAY BLOCK valve.

STANDARD: At C5705, applicant attempts to close RC 10, SPRAY BLOCK valve but valve will not change position.

NOTE: RC 10 SPRAY BLOCK valve indicates open (red light ON).

CUE: As Shift Manager, acknowledge that RC 10 Spray block valve will not move.

SAT UNSAT

4. PERFORMANCE STEP: Verifies reactor power to less than 72%

STANDARD: At C5707 applicant verifies reactor power to less than or equal to 72%.

CUE: As Shift Manger, I will review Tech Spec 3.4.1.

SAT UNSAT

5. PERFORMANCE STEP: Place SG Load Ratio Hand/Auto Station in Auto.

STANDARD: At C5710, applicant places SG Load Ratio Hand/Auto Station in AUTO.

SAT UNSAT

6. PERFORMANCE STEP: Stop RCP 2-2 (HIS RC5A2)

STANDARD: At C5718, applicant stops RCP 2-2 using HIS RC5A2.

NOTE: Breaker indicates tripped.

SAT UNSAT

7. PERFORMANCE STEP: Observes that RCS Pressure starts to rise.

STANDARD: At C5705, applicant verifies RCS Pressure is rising.

SAT UNSAT

TERMINATING CUE: When applicant acknowledges that RCS pressure is rising, state,
This JPM is complete.

END TIME

WHAT IF APPLICANT TRIPS ON LOW RCS PRESSURE?

Verification of Completion

Job Performance Measure No. C

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: _____

**Control Room
JPM D**

Facility: Davis-Besse

Task No:

Task Title: Set Up for Main Turbine Overspeed Trip TestingK/A Reference: 041 A4.08 (3.8)Job Performance Measure No: D

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? No**Method of testing:**

Simulated Performance ___

Actual Performance X

Classroom ___

Simulator X

Plant ___

Read to the examinee:**Initial Conditions:**

The unit is coming out of an outage. The main turbine was synchronized and loaded to the grid one hour ago.

Initiating Cues:

The Shift Supervisor has directed you to set up for main turbine overspeed trip testing IAW DB-OP-06902, Power Operations, Attachment 1, steps 3 - 9. Prerequisites 1 and 2 have been completed.

Task Standard:

Ability to manually operate and/or monitor in the control room, steam bypass valve operation.
Ability to manually operate and/or monitor in the control room, switchyard breakers.

Required Materials:

None

General References:

DB-OP-06902, "Power Operations"

Time Critical Task: No**Validation Time:** 10 minutes ?**Simulator Setup:**

INITIAL CONDITIONS:

The unit is coming out of an outage. The main turbine was synchronized and loaded to the grid one hour ago.

INITIATING CUES:

The Shift Supervisor has directed you to set up for main turbine overspeed trip testing IAW DB-OP-06902, Power Operations, Attachment 1, steps 3 - 9. Prerequisites 1 and 2 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 required unless denoted in the "Comments".

START TIME: _____

1. PERFORMANCE STEP: Locate the correct procedure section.

STANDARD: Identifies DB-OP-06902, Attachment 1, as the correct procedure and section.

SAT UNSAT

2. PERFORMANCE STEP: Verifies Prerequisite signoff step has been signed.

STANDARD: Verifies prerequisite step has been signed off.

SAT UNSAT

3. PERFORMANCE STEP: Place TBVs in HAND.

____C____

STANDARD: Places both TBV controllers to HAND. Red light off, white light on.

SAT UNSAT

4. PERFORMANCE STEP: Slowly lowers turbine load by opening TBVs.

____C____

STANDARD: Adjusts TBV controllers to open TBVs. Monitors turbine load reduction.

SAT UNSAT

5. PERFORMANCE STEP: Monitor TBV POS on one H/A Station and MEAS VAR on the other H/A Station as load approaches 92 MWe.

STANDARD: Places one TBV controller in POS and the other TBV controller in MEAS VAR. Monitors turbine load.

SAT UNSAT

6. PERFORMANCE STEP: WHEN load is 80 MWe, THEN place the TBVs in AUTO as follows:

___C___

- Verify the TBV 50 psi bias is removed.
- Depress LOAD CONTROL SELECTOR MANUAL pushbutton.
- Transfer the TBVs to AUTO.

STANDARD: TBV 50 psi bias is removed when ???????
Depresses LOAD CONTROL SELECTOR MANUAL PB at turbine control panel.
Transfers TBVs to AUTO by taking both TBV Control stations to AUTO.

SAT UNSAT

7. PERFORMANCE STEP: Continue slowly reducing turbine load using the LOAD SELECTOR DECREASE push button until load is lowered to between 10 and 20 Mwe.

STANDARD: Slowly lowers turbine load using LOAD SELECTOR DECREASE PB until load is between 10 and 20 Mwe.

SAT UNSAT

8. PERFORMANCE STEP: WHEN Turbine load is 10 to 20 MWe, then take the Generator off line as follows:

- Null GEN FIELD XFER VOLTS.
- Place HIS 6011, VOLTAGE REG TRANSFER, to MAN.

STANDARD: Nulls generator field xfer volts. Places HIS 6011 to Manual.

SAT UNSAT

9. PERFORMANCE STEP: WHEN Turbine load is 10 to 20 MWe, then take the Generator off
____C____ line as follows:

- Open breaker ACB 34560, using HIS 6111.
- Open breaker ACB 34561, using HIS 6113.
- Open the GENERATOR FIELD BREAKER using HIS 6010.
- Open the EXCITER FIELD BREAKER using HIS 6021.

STANDARD: Opens ACB 34560 and ACB 34561 using control switches on turbine electric control panel.
Opens the Generator field breaker.
Opens the Exciter field breaker.

SAT UNSAT

10. PERFORMANCE STEP: Informs Load Dispatcher time in which the generator load breakers were opened.

STANDARD: Notifies Load Dispatcher time in which ACB34560 and ACB34561 were opened.

CUE: As load dispatcher, acknowledge time that ACB 34560 and ACB 34561 were opened.

SAT UNSAT

11. PERFORMANCE STEP: Informs shift supervisor that main turbine is ready for trip testing.

STANDARD: Shift supervisor informed that main turbine is ready for trip testing.

CUE: As shift supervisor, acknowledge that main turbine is ready for trip testing.

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

END TIME

Verification of Completion

Job Performance Measure No. D

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: _____

**Control Room
JPM E**

Facility: Davis-Besse

Task No:

Task Title: Setup to Initiate MU/HPI CoolingK/A Reference: 074 EA1.09(3.7/3.8)Job Performance Measure No: E

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? Yes**Method of testing:**

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The reactor has experienced an event followed by a reactor trip.

Initiating Cues:

The Unit Supervisor has directed you to perform DB-OP-02000, Step 4.1, Specific Rule Check.

Task Standard:

To operate and monitor from the control room the makeup system during inadequate core cooling conditions.

Knowledge of EOP entry conditions and immediate action steps.

Knowledge of symptom-based EOP mitigation strategies.

Required Materials:

None

General References:

DB-OP-02000, Attachment 4, "Initiate MU/HPI Cooling."

Time Critical Task: No**Validation Time:** 15 minutes**Simulator Setup:**

Need to start with accident IC that has loss of all Main Feedwater, and loss of all AFW. Annunciators 10-2-G and 10-4-H are in. MDFP does not start. MUP#2 does not start.

INITIAL CONDITIONS:

The reactor has experienced an event followed by a reactor trip.

INITIATING CUES:

The Unit Supervisor has directed you to perform DB-OP-02000, Step 4.1, Specific Rule Check.

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: Locate the correct procedure section.

STANDARD: Locates DB-OP-02000, Step 4.1 as the correct procedure and section.

NOTE: Inform Simulator Driver to take Simulator out of Freeze.

SAT UNSAT

2. PERFORMANCE STEP: Performs Specific Rule Check
Specific Rule 2, Actions for loss of Subcooling Margin, does not apply.
Specific Rule 4, Steam Generator Control, condition DOES apply.
Specific Rule 6, Power to C1 / D1 / EDG Start, does not apply.

STANDARD: Recognizes that Specific Rule 4 applies for loss of all FW.

SAT UNSAT

3. PERFORMANCE STEP: Enters Specific Rule 4 and performs Attachment 5:
Verify Bus D2 is energized.
Enable HIS6460 and HIS6459 (MDFP Discharge Vlv)
Close both MDFP Discharge Valves.
Start MDFP.

STANDARD: Verifies Bus D2 is energized by viewing electric plant status.
Enables HIS6460 and HIS6459 by depressing black buttons on controllers.
Verifies both MDFP discharge valves are closed as indicated on controllers.
Attempts to start the MDFP on center front desk. MDFP will not start.

SAT UNSAT

START ALTERNATE PATH HERE.

4. PERFORMANCE STEP: Informs SRO that MDFP will not start.
Recognizes total loss of all FW
Enters Specific Rule 4 RNO column

STANDARD: Informs Command SRO that MDFP did not start.
Informs SRO of need to enter into DB-OP-02000, Attachment 4, RNO column.

CUE: Command SRO directs you to perform Attachment 4.

SAT UNSAT

5. PERFORMANCE STEP: Attempts to start MUP #2. Identifies that MUP #2 does NOT
 C start.
Suggests that SRO enter into Attachment 4 of DB-OP-02000.

STANDARD: Informs SRO that MUP #2 did not start and the need to enter into DB-OP-02000, Attachment 4, Initiate MU/HPI Cooling.

CUE: As SRO, acknowledge that MUP#2 did not start and will enter into Attachment 4.

NOTE: Attachment 4 is an SRO-Directed procedure. Examiner should participate in 3-part communications when applicant performs Attachment 4.

SAT UNSAT

6. PERFORMANCE STEP: Trip all but one RCP. Leave RCP 2-2 in service for Pzr spray.
 C

STANDARD: At back center panel, takes all RCP trip control switches to trip except RCP 2-2. Leaves RCP 2-2 operating.

SAT UNSAT

7. PERFORMANCE STEP: Verify Attachment 8 is in progress.

STANDARD: Alerts SRO that Attachment 8 should be in progress.

CUE: Attachment 8 is in progress.

SAT UNSAT

- 8.. PERFORMANCE STEP: Place all pressurizer heaters in OFF.

 C

STANDARD: At C5705 panel, applicant starts places all pZR heaters to OFF position and SCR Heaters to MANUAL set to 0.

 SAT UNSAT

9. PERFORMANCE STEP: If #2 MUP is the only MUP running, THEN close MU6409.

 C

STANDARD: At front panel, applicant verifies #1 MUP operating.
At SFAS panel, applicant closes MU6408 valve.

NOTE: Applicant should N/A steps 5 & 7 in Attachment 4.

 SAT UNSAT

10. PERFORMANCE STEP: Open MU6420, PZR Level Control Valve Bypass.

 C

STANDARD: At MU panel, applicant opens MU6420, red light ON and green light OFF.

 SAT UNSAT

11. PERFORMANCE STEP: Verify MU6421, MU Alternate Injection Line CTMT Isol valve is OPEN.

STANDARD: At MU panel, applicant opens/verifies open MU6421.
MU6421 indicator, red light on, green light off.

 SAT UNSAT

12. PERFORMANCE STEP: Open MU6419, MU Alternate Injection Line.

 C

STANDARD: At MU panel, applicant opens MU6419.
MU6419 indicator, red light on, green light off.

 SAT UNSAT

13. PERFORMANCE STEP: Verify MU6422, MU Ctmt Isolation valve is Open.

STANDARD: At SFAS panel, applicant opens MU6422 valve.
MU6422 indicator, red light on, green light off.

 SAT UNSAT

14. PERFORMANCE STEP: CLOSE MU6407, MU Pump 1 Minimum Recirc valve.
 C CLOSE MU6406, MU Pump 2 Minimum Recirc valve.

STANDARD: At SFAS panel, applicant closes MU6407 and MU 6406 valves.
 MU6407 and MU6406 indicators, green light on, red light off.

 SAT UNSAT

15. PERFORMANCE STEP: Verify RC11, PORV Block valve is Open.

STANDARD: At (location), applicant verifies RC11 valve is open.
 RC11 indicator, red light on, green light off.

 SAT UNSAT

16. PERFORMANCE STEP: Verify Attachment 8, Place MU/HPI/LPI in Service is complete.

CUE: When asked, Inform applicant that Attachment 8 has been completed.

 SAT UNSAT

17. PERFORMANCE STEP: Lock Open RC2A, PORV.

 C

STANDARD: At front left panel, applicant locks open RC2A, PORV.
 RC2A amber Locked Open light lit.

 SAT UNSAT

18. PERFORMANCE STEP: IF Adequate Subcooling Margin is lost, THEN Trip all RCPs.

 C

STANDARD: At subcooling panel, applicant checks for subcooling margin >30°F.
 When subcooling is lost, then trips last RCP.

NOTE: Due to plant conditions, subcooling margin is expected to be lost.

 SAT UNSAT

19. PERFORMANCE STEP: Open Loop 1 high point vents, RC4608B, RC4608A.

STANDARD: At subcooling panel, applicant opens RC4608A and RC4608B
 RC4608 indicators, red light on, green light off.

 SAT UNSAT

20. PERFORMANCE STEP: Open Loop 2 high point vents, RC4610B, RC4610A.

STANDARD: At subcooling panel, applicant opens RC4610A and RC4610B
RC4610 indicators, red light on, green light off.

SAT UNSAT

21. PERFORMANCE STEP: Open PZR High Point Vents, RC200, RC239A

STANDARD: At subcooling panel, applicant opens RC200. RC239A valve is located by
pressurizer heaters.
RC200 and RC239A indicators, red light on, green light off.

SAT UNSAT

22. PERFORMANCE STEP: Check for entry into PTS Criteria. Refer to Specific Rule 5.

CUE: If asked, as shift manager, report that entry into PTS criteria has not been met.

SAT UNSAT

23. PERFORMANCE STEP: IF MU pump room cooling is NOT available and the area is
accessible, THEN, prop open MU Pump room door.

STANDARD: Applicant contacts operator in field and orders MU pump room door propped
open.

CUE: MUP Room door is propped open.

SAT UNSAT

24. PERFORMANCE STEP: Close either of the following to isolate letdown,
MU2B, Letdown Isolation valve
MU3, Letdown Coolers Outlet valve.

STANDARD: Closes MU2B. (MU3 closed by SFAS Level 3 actuation).

SAT UNSAT

25. PERFORMANCE STEP: Prevent transfer of water from ctmt normal Sump to the Auxiliary as follows:

- Close DR2012A, Ctmt Normal Sump
- Close DR2012B, Ctmt Normal Sump

STANDARD: At SFAS panel, applicant closes DR2012A and DR2012B valves

SAT UNSAT

Terminating cue: This JPM is complete (Terminated by applicant)

END TIME

Verification of Completion

Job Performance Measure No. E

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: _____

**Control Room
JPM F**

Facility: Davis-Besse

Task No:

Task Title: Spray Containment – Post LOCAK/A Reference: 026 A2-04 (3.9/4.2)Job Performance Measure No: F

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? Yes**Method of testing:**

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

A LOCA has occurred. Containment pressure has exceeded the SFAS Level 4 setpoint and containment spray pumps have not started.

Initiating Cues:

The Command SRO has directed you to manually start a containment spray pump and spray containment.

Task Standard:

Lineup and start Containment Spray system.

Mitigate consequences of a failed containment spray pump.

Required Materials:

None

General References:

DB-OP-06013, "Containment Spray System Procedure"

DB-OP-02000

Time Critical Task: No

Validation Time: 5 minutes

Simulator Setup: IC-246

Use accident IC with high containment pressure above SFAS Level 4 setpoint.

Insert malfunction that inhibits start of both containment spray pumps and opening of CS discharge valves. Both containment spray pump discharge valves, (CS1530 and CS1531) are closed.

During JPM performance, if applicant attempts to start the first pump, simulator operator removes malfunction inhibiting start of second CS pump.

INITIAL CONDITIONS:

A LOCA has occurred. Containment pressure has exceeded the SFAS Level 4 (?) setpoint and containment spray pumps have not started.

INITIATING CUES:

The Command SRO has directed you to manually start a containment spray pump and spray containment.

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: Locate the correct procedure section.

STANDARD: Identifies DB-OP-02000, SFAS Table 2 OR
DB-OP-06013, Sect 5 or 6 as the correct procedures.

SAT UNSAT

2. PERFORMANCE STEP: Verify DH7, BWST ISOLATION VALVE is open associated with first CS Pump

STANDARD: At SFAS panel, applicant verifies that DH7 indicator green light OFF and red light ON.

SAT UNSAT

3. PERFORMANCE STEP: Verify CTMT SPRAY DISCH open or throttled associated with first CS Pump to start.

STANDARD: At SFAS panel, applicant finds CS1530 (CS1531) valve closed.
Applicant opens or throttles open valve using HIS 1530 (1531)
Valve indicator green light off and red light on.

NOTE: Green indicator is on until 20% open.

SAT UNSAT

4. PERFORMANCE STEP: Start first CTMT SPRAY PUMP.

STANDARD: Applicant starts first CS pump by operating HIS switch to close position.

NOTE: First CS pump will not start.

CUE: As shift manager, acknowledge that CS Pump did not start.

SAT UNSAT

START ALTERNATE PATH JPM HERE

5. PERFORMANCE STEP: Recognizes that first CS pump did not start.
____C____

STANDARD: Applicant looks at pump amps, flow indication, discharge pressure and determines that first CS pump did not start.

COMMENT: Applicant may depress BLOCK then reattempt to start pump, but it won't work. Applicant should, without cue, attempt to start other CS Pump.

SAT UNSAT

6. PERFORMANCE STEP: Verify DH7, BWST ISOLATION VALVE is open associated with second CS pump.

STANDARD: At SFAS panel, applicant verifies that DH7 indicator green light OFF and red light ON.

SAT UNSAT

7. PERFORMANCE STEP: Verify CS1531 (1530), CTMT SPRAY DISCH open or throttled.
____C____

STANDARD: At SFAS panel, applicant must open or throttle valve using HIS 1531 (1530). Valve indicator green light off and red light on.

NOTE: Green indicator is on until 20% open.

SAT UNSAT

8. PERFORMANCE STEP: Start second CTMT SPRAY PUMP.
____C____

STANDARD: Applicant starts second CS pump by operating HIS switch to close position.

SAT UNSAT

9. PERFORMANCE STEP: Verify flow indicated on FI1535, CS PUMP 2 DISCH FLOW.

_____C_____

STANDARD: At SFAS panel, applicant throttles open on CTMT SPRAY DISCH valve to verify flow on FI1535 (FI 1534).

COMMENT: Applicant needs to throttle valve open far enough to clear Annunciator 3-2-J, (~1100 gpm).

SAT UNSAT

Terminating cue: This JPM is complete (Terminated by applicant)

END TIME

Verification of Completion

Job Performance Measure No. F

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: _____

**Control Room
JPM G**

Facility: Davis-Besse

Task No:

Task Title: Energize Bus C1 from Bus AK/A Reference: 062 A4.07 (3.1/3.1)
056 AA1.02 (4.0/3.9)Job Performance Measure No: G

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? Yes**Method of testing:**

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The plant was in MODE 5 with Decay Heat Loop 2 operating.

A loss of offsite power occurred.

EDG 1 tripped and efforts to restart it have been unsuccessful.

EDG 2 is providing power to D1 and D2 Buses.

Decay Heat Pump 2 breaker would not re-close after D1 power was restored.

Initiating Cues:

Offsite power has been restored.

The Command SRO directs you to energize A Bus from 01 Transformer then energize C1 Bus from A Bus in accordance with Attachment 6 of DB-OP-02521, Loss of AC Bus Power Sources.

Task Standard:

Paralleling different AC power supplies.

Use of ESF Bus synchronization switch to close bus tie breakers.

Required Materials:

None

General References:

DB-OP-02521, Loss of AC Bus Power Sources

Time Critical Task: No**Validation Time:** 10 minutes ?

Simulator Setup:

Initialize to MODE 5 IC with DH Loop 2 operating. **Use (IC25)**

Manually de-energize A and B buses to simulate a loss of offsite power followed by restoration of offsite power

Place caution tags on the Hand Switches for both HPI Pumps and both Ctmt Spray Pumps

Malfunctions/Failures to Insert:

HX01A fail open
IMF E101C

Fail open DH Pump 2 breaker
IMF BDP2C

Emergency Shutdown #1 EDG
IRF G529G

Energize D2 Bus from D1 Bus

INITIAL CONDITIONS:

The plant was in MODE 5 with Decay Heat Loop 2 operating.
A loss of offsite power occurred.
EDG 1 tripped and efforts to restart it have been unsuccessful.
EDG 2 is providing power to D1 and D2 Buses.
Decay Heat Pump 2 breaker would not re-close after D1 power was restored.

INITIATING CUES:

Offsite power has been restored.
In accordance with Attachment 6 of DB-OP-02521, Loss of AC Bus Power Sources.
The Command SRO directs you to:

- Energize A Bus from 01 Transformer, then
- Energize C1 Bus from A Bus

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: Locate the correct procedure step

STANDARD: Finds Attachment 6 step 1.0

SAT UNSAT

2. PERFORMANCE STEP: Verify Bus A large motor breakers OPEN

STANDARD: Visual check of hand switches:

RCP 1-1 - HIS RC5B1 Green light LIT

RCP 2-2 - HIS RC5A2 Green light LIT

Circ Pump 1 - HIS 876 Green light LIT

Circ Pump 3 - HIS 928 Green light LIT

CUE: EO reports that RCP 1-1 and RCP 2-2 breakers are Open.

SAT UNSAT

3. PERFORMANCE STEP: Place BUS A SYNC CHECK in the 01 position, wait 15 seconds.

STANDARD: HS 6293 BUS A SYNC CHECK placed in 01 position, waits 15 sec.

SAT UNSAT

4. PERFORMANCE STEP: Attempt to close Bus A supply from 01 transformer

STANDARD: HIS 6203 HX01A placed to CLOSE

CUE: HX01A failed to close.

COMMENT: HX01A will NOT close due to failure

SAT UNSAT

START ALTERNATE PATH HERE

5. PERFORMANCE STEP: Place BUS A SYNC CHECK switch in OFF

STANDARD: HS 6293 BUS A SYNC CHECK placed in OFF position

CUE: (If asked), The Unit Supervisor directs you to energize Bus A from Startup Transformer 02

SAT UNSAT

6. PERFORMANCE STEP: Place BUS A SYNC CHECK in the 02 position, waits 15 sec.

C

STANDARD: HS 6293 BUS A SYNC CHECK placed in 02 position, waits 15 sec.

SAT UNSAT

7. PERFORMANCE STEP: Close Bus A supply from 02 transformer

C

STANDARD: HIS 6201 HX02A placed to CLOSE, Red light on, Green light off.

SAT UNSAT

8. PERFORMANCE STEP: Place BUS A SYNC CHECK switch in OFF

STANDARD: HS 6293 BUS A SYNC CHECK placed in OFF position.

CUE: If asked as Shift Manager, I understand Bus A is energized and ready for loading.

SAT UNSAT

9. PERFORMANCE STEP: Verify Bus C2 breaker alignment per Attachment 3

STANDARD: Verify C2 Bus breakers open

Contact an Equipment Operator to verify AC212 is open

Visual check of the following switches:

AACC2 BUS TIE XFMR AC

AC205 PPF AND NEW FAB SHOP

AC206 CLNG WTR PUMP 1

AC208 CLNG WTR PUMP 3

AC202 CLNG TWR M. U. PMP 1

AC201 BACKUP SW PUMP

AC204 HTR DRN PMP 1

AC210 CNDS PMP 1

AC207 CNDS PMP 3

CUE: As NLO, report back that AC212 breaker is open.

SAT UNSAT

10. PERFORMANCE STEP: Close HAAC

C

STANDARD: Verify HIS 6207 HAAC indicates CLOSED

SAT UNSAT

11. PERFORMANCE STEP: Close AACC2

C

STANDARD: HIS 6218 AACC2 rotated to CLOSE

SAT UNSAT

12. PERFORMANCE STEP: Perform Attachment 1 Bus C1 breaker alignment to verify EDG 1 is shut down.

STANDARD: Visual check of EDG 1 speed at zero and/or EDG 1 FAULT annunciator

SAT UNSAT

13. PERFORMANCE STEP: Verify Bus C1 breaker alignment per Attachment 1

STANDARD: Visual check of the following switches OPEN:
AC107 SERVICE WATER PUMP 1
AC112 DECAY HT PMP 1
AC111 HP INJ PMP 1
AC109 SERVICE WATER PUMP 3
AC108 CCW PUMP 3
AC105 MU PMP 1

COMMENT: AC113 CCW PUMP 1 breaker must be opened – see next step

SAT UNSAT

14. PERFORMANCE STEP: Open AC113 CCW PUMP 1 breaker

C

STANDARD: AC113 CCW PUMP 1 breaker switch rotated to OPEN

COMMENT: AC113 stayed closed during bus C1 undervoltage, per design

SAT UNSAT

15 PERFORMANCE STEP: Verify Bus C1 source breakers open.

STANDARD: Visual check of the following switches:
AC110 BUS TIE C2
ABDC1 BUS TIE XFER BD
AC101 EDG TIE TO C1

SAT UNSAT

16. PERFORMANCE STEP: Close AC110
C

STANDARD: HIS 6223 AC110 rotated to CLOSE

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. G

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: _____

**Control Room
JPM H**

Facility: Davis-Besse

Task No:

Task Title: Resetting a Tripped RPS ChannelK/A Reference: 015 A4.04 (3.3/3.3)Job Performance Measure No: H

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? No**Method of testing:**

Simulated Performance ____

Actual Performance X

Classroom ____

Simulator X

Plant ____

Read to the examinee:**Initial Conditions:**

The plant is in Mode 1 operation. RPS Channel #3 was tripped using the High Building pressure contact buffer module.

Initiating Cues:

The Unit Supervisor directs you to reset RPS Channel #3 in accordance with DB-OP-06403, RPS and Nuclear Instrumentation Operating Procedure.

Task Standard:

Ability to manually operate RPS channel trip and reset switches.

Required Materials:

DB-OP-06403, "Reactor Protection System (RPS) and Nuclear Instrumentation (NI) Operating Procedure"

General References:

DB-OP-06403, "Reactor Protection System (RPS) and Nuclear Instrumentation (NI) Operating Procedure"

Time Critical Task: No**Validation Time:** 10 minutes**Simulator Setup:**

RPS Channel #3 is tripped.

INITIAL CONDITIONS:

The plant is in Mode 1 operation. RPS Channel #3 was tripped using the High Building pressure contact buffer module.

INITIATING CUES:

The Unit Supervisor directs you to reset RPS Channel #3 in accordance with DB-OP-06403, RPS and Nuclear Instrumentation Operating Procedure.

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: Locate the correct procedure section.

STANDARD: Identifies DB-OP-06403, Section 4.2, as the correct procedure and section.

SAT UNSAT

2. PERFORMANCE STEP: Verify prerequisites...

STANDARD: Applicant verifies Shift Manager has given permission to reset RPS #3.

CUE: Shift manager has given permission to reset RPS Channel #3.

SAT UNSAT

3. PERFORMANCE STEP: Obtain door key for the RPS Channel #3 and unlocks RPS
 C Channel #2 cabinet.

STANDARD: Applicant obtains door key for RPS Channel #3 from key locker.
Unlocks RPS Channel #3 cabinet.

NOTE: Ensure that applicant does NOT sign key log.

CUE: For this exam, you do not need to sign the key log.

SAT UNSAT

4. PERFORMANCE STEP: N/A's step 4.2.3

STANDARD: Step 4.2.3 is N/A'd since RPS was tripped using the high building pressure contact buffer module.

SAT UNSAT

5. PERFORMANCE STEP: Momentarily depress the RESET switch and
____C____ Check both INPUT STATE lights are OFF.

STANDARD: At RPS Channel #3, left cabinet, depresses HI BLDG Press RESET switch.
Checks both INPUT STATE lights are off.

SAT UNSAT

6. PERFORMANCE STEP: N/A's Step 4.2.5.

STANDARD: N/A's step 4.2.5 since RPS Shutdown Bypass was NOT previously
actuated.

SAT UNSAT

7. PERFORMANCE STEP: IF any of the following trip bistables OUTPUT STATE or
OUTPUT MEMORY LIGHTS are BRIGHT, THEN reset the trip bistable by momentarily
depressing the OUTPUT STATE and OUTPUT MEMORY RESET SWITCHES and
check the status lights are DIM;
Power/Pumps trip bistable
Power Imbalance/Flow trip bistable
Over Power trip bistable
Low Press trip bistable
High Press trip bistable
High Temp trip bistable
Press/Temp trip bistable.

STANDARD: N/A's step since none of these bistables should be tripped. However,
applicant should check that ALL bistable status lights are dim.

SAT UNSAT

8. PERFORMANCE STEP: Depress and release the RESET SWITCH on the REACTOR
____C____ TRIP module.

STANDARD: Depresses and releases reset switch on reactor trip module (right cabinet).

SAT UNSAT

9. PERFORMANCE STEP: Check the PROTECTIVE SUB-SYSTEM light on the indicating
panel is DIM.

STANDARD: Verifies that RPS Channel sub-system lights are dim.

SAT UNSAT

10. PERFORMANCE STEP: Informs Shift Manager that RPS Channel #3 has been reset.

STANDARD: Informs SM that RPS Channel #3 has been rest.

CUE: Acknowledge as Unit Supervisor, that RPS Channel #3 has been reset.

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. H

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: _____

**In-Plant
JPM I**

Facility: Davis-Besse

Task No:

Task Title: Emergency Startup of the Start Up Feed Water PumpK/A Reference: 059 AA1.02 (4.4/4.4)Job Performance Measure No: 1

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? No**Method of testing:**Simulated Performance X

Actual Performance ____

Classroom ____

Simulator ____

Plant X**Read to the examinee:****Initial Conditions:**

You are the Zone operator.

A loss of main feedwater, auxiliary feedwater, and the motor driven feedwater pump has occurred.

Initiating Cues:

The Field Supervisor directs you to place the Startup Feedwater Pump in service per the Emergency operation section of DB-OP-06226, Startup Feedwater Pump System Operating Procedure.

Task Standard:

Ability to manually startup the electric Startup Feedwater Pump.

Ability to monitor AFW controls including use of alternate AFW sources.

Required Materials:

None

General References:

DB-OP-06226, "Startup Feedwater Pump Operating Procedure"

Time Critical Task: No**Validation Time:** 10 minutes

INITIAL CONDITIONS:

You are the Zone operator.

A loss of main feedwater, auxiliary feedwater, and the motor driven feedwater pump has occurred.

INITIATING CUES:

The Field Supervisor directs you to place the Startup Feedwater Pump in service per the Emergency operation section of DB-OP-06226, Startup Feedwater Pump System Operating Procedure.

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: Locate the correct procedure section.

STANDARD: Identify section 5.1.

COMMENTS: Hand the examinee a copy of DB-OP-06226.

CUE: **None.**

SAT UNSAT

2. PERFORMANCE STEP: Notify Security access will be required to Room 238.

STANDARD: Gai-Tronics or phone call made.

CUE: **Officer is being dispatched.**

SAT UNSAT

3. PERFORMANCE STEP: Open FW 106, SUFP to Main FW Line Isolation.

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

STANDARD: FW 106 opened.

CUE: **Hand wheel has been rotated counterclockwise. Valve stem is OUT.**

SAT UNSAT

4. PERFORMANCE STEP: Open FW 32, SUFP Suction From Deaerator Storage
.....**C**..... Tanks.

STANDARD: FW 32 opened.

CUE: **Hand wheel has been rotated counterclockwise. Valve stem is OUT.**

SAT UNSAT

-
5. PERFORMANCE STEP: Open CW 196, SUFP Seal Water Cooler Inlet Header
.....**C**..... Isolation

STANDARD: CW 196 opened.

CUE: **Hand wheel has been rotated counterclockwise. Valve stem is OUT.**

SAT UNSAT

6. PERFORMANCE STEP: Open CW 197, SUFP Seal Water Cooler Outlet Header
.....**C**..... Isolation.

STANDARD: CW 197 opened.

CUE: **Hand wheel has been rotated counterclockwise. Valve stem is OUT.**

SAT UNSAT

7. PERFORMANCE STEP: Obtain SM permission to remove Caution Tag on AC212 bkr.
Remove Caution Tag from AC212 bkr.
Rack in AC212, Start-up FD Pump breaker.

STANDARD: Requests permission to remove Caution tag from AC212 bkr and rack in the breaker.

CUE: **Another operator will remove the caution tag from the breaker and rack in breaker AC212.**

SAT UNSAT

8. PERFORMANCE STEP: Start SUFP.
.....**C**.....

STANDARD: Local START button (NP0150) pressed.

CUE: **Local START PB has been depressed, pump shaft starts turning, pump produces noise.**

SAT UNSAT

9. PERFORMANCE STEP: Notify CTRM.

STANDARD: CTRM notified by radio or Gai-Tronics that feed is available for the Steam Generators through Main Feed Water System.

CUE: **CTRM acknowledges Startup Feedwater Pump is available.
CTRM requests that you monitor flow and report when it reaches 280 gpm.**

SAT UNSAT

10. PERFORMANCE STEP: Notify CTRM when flow reaches 280 gpm.

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

STANDARD: CTRM notify via Gai-Tronics or radio when PDI-2657 flow is between 260 and 300 gpm.

COMMENT: After examinee locates PDI-2657, show flow rising in increments until examinee makes notification.

CUE: **Flow on PDI-2657 indicates 280 gpm.**

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. 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: _____

**In-Plant
JPM J**

Facility: Davis-Besse

Task No:

Task Title: Recirculation of the BWST for Temperature ControlK/A Reference: 006A1.15 (3.3/3.9)Job Performance Measure No: J

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? No**Method of testing:**Simulated Performance X

Actual Performance ____

Classroom ____

Simulator ____

Plant X**Read to the examinee:****Initial Conditions:**

The plant is in Mode 1. Maintenance has been completed on BWST recirculation pump. Tags have been removed and system lineups have been completed IAW DB-OP-06015, Attachments 1 and 2.

Initiating Cues:

The shift manager has requested you place the BWST in recirculation mode using the BWST recirc pump in accordance with DB-OP-06015, BWST Operating Procedure.

EXAMINER NOTE: Examiner to use RWP 160, Task 1.**Task Standard:**

Ability to predict and/or monitor changes in BWST temperatures to prevent exceeding design temperature limits.

Ability to locally operate and monitor the BWST recirculation pump.

Required Materials:

Provide applicant a copy of DB-OP-06015, with steps 3.5.1 to 3.5.8 already completed (initialed).

General References:

DB-OP-06015, "BWST System Operating Procedure"

Time Critical Task: No**Validation Time:** 10 minutes

INITIAL CONDITIONS:

The plant is in Mode 1. Maintenance has been completed on BWST recirculation pump. Tags have been removed and system lineups have been completed IAW DB-OP-06015, Attachments 1 and 2.

INITIATING CUES:

The shift manager has requested you place the BWST in recirculation mode using the BWST recirc pump in accordance with DB-OP-06015, BWST Operating Procedure.

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: Identifies that Section 3.1 of DB-OP-06015 is applicable.

STANDARD: Identifies that Section 3.1 of DB-OP-06015 is applicable.

SAT UNSAT

2. PERFORMANCE STEP: Verifies that prerequisite steps 3.1.1 and 3.1.2 are completed.

STANDARD: Verifies that prerequisite steps 3.1.1 and 3.1.2 are completed

CUE: Prerequisites checklists have been completed.

SAT UNSAT

3. PERFORMANCE STEP: Verify the following breakers are ON:

____C____ BE2264 (E22B), MV 26880 Borated Water Recirc Suction.
BE2283, (E22B), MP 0570 BWST Circ Pump. Vlv Isolation.

STANDARD: Applicant goes to Bkr Panel E22B (near the BWST recirc skid) and simulates closing breakers BE2264 and BE2283.

CUE: Breakers BE2264 and BE2283 indicated as ON.

SAT UNSAT

4. PERFORMANCE STEP: Verify BW 7, BWST TO SFP PUMPS OR BW RECIRC PUMP, is open.

STANDARD: Applicant asks Shift Manager if valve has recently been positioned

CUE: BW7 was opened on the previous shift. (As shift manager, sign step IAW Note 3.1.4).

Comment: Valve is located in BWST pit (Confined space, radiation/contamination area).

SAT UNSAT

5. PERFORMANCE STEP: Verify BW 2688, BWST Recirc Pump 1-1 Suction, is open.

STANDARD: As found, valve is open, Red light on, green light off.

CUE: HIS2688 indication: Red light ON, Green light OFF.

SAT UNSAT

6. PERFORMANCE STEP: Start Borated Water Recirc Pump using HIS 1613, Borated
___C___ Water Recirc Pump.

STANDARD: Applicant calls control room and has operator start Borated Water Recirc Pump.

CUE: Control room reports they have started the Borated Water Recirc Pump. You see a discharge pressure building.

SAT UNSAT

7. PERFORMANCE STEP: Throttle BW 19, BWST Heater Outlet Throttle Vlv, to
___C___ approximately 170 gpm as indicated on FIS1621, BWST HTR Borated Water Inlet.

STANDARD: Applicant simulates throttling BW19 valve in CCW direction until 170 gpm is indicated on FIS1621.

CUE: BW19 is throttled open in CW direction until 170 gpm indicates on FIS1621.

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. J

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: _____

**In-Plant
JPM K**

Facility: Davis-Besse

Task No:

Task Title: Recover from High Radiation in Spent Fuel Pool AreaK/A Reference: 033 K3.02 (2.8/3.2)Job Performance Measure No: K

Examinee: _____

NRC Examiner: _____

Date: _____

Alternate Path? No**Method of testing:**Simulated Performance X

Actual Performance ____

Classroom ____

Simulator ____

Plant X**Read to the examinee:****Initial Conditions:**

During the movement of a filter transfer cask in the Auxiliary Building, RE 8446 and RE 8447 tripped on high radiation. The Fuel Handling Ventilation System automatically shutdown and the Station EVS automatically started.

The filter transfer cask move has been completed and radiation levels have returned to normal. RE 8446 and RE 8447 have been below the Alert setpoint for 2 hours and are reset.

Initiating Cues:

The Unit Supervisor directs you to restore the Fuel Handling Ventilation System and start Fuel Handling Exhaust Fan 1 in accordance with DB-OP-06504, Emergency Ventilation System beginning with step 5.1.6. Steps 5.1.1 through 5.1.5 have been completed.

Examiner NOTE: Examiner to use RWP 160, Task 1.**Task Standard:**

The ability to manually operate the spent fuel pool cooling ventilation system. Knowledge of the effects that radiation monitoring system has on the normal and emergency ventilation systems in the spent fuel pool area.

Required Materials:

None

General References:

DB-OP-06504, "Emergency Ventilation System Procedure"
OPSJPM37

Time Critical Task: No**Validation Time:** 10 minutes ?

INITIAL CONDITIONS:

During the movement of a filter transfer cask in the Auxiliary Building, RE 8446 and RE 8447 tripped on high radiation. The Fuel Handling Ventilation System automatically shutdown and the Station EVS automatically started.

The filter transfer cask move has been completed and radiation levels have returned to normal. RE 8446 and RE 8447 have been below the Alert setpoint for 2 hours and are reset.

INITIATING CUES:

The Unit Supervisor directs you to restore the Fuel Handling Ventilation System and start Fuel Handling Exhaust Fan 1 in accordance with DB-OP-06504, Emergency Ventilation System beginning with step 5.1.6. Steps 5.1.1 through 5.1.5 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 required unless denoted in the "Comments".

START TIME: _____

1. PERFORMANCE STEP: Requests Control Room reset RE 8446 and RE 8447

STANDARD: Calls control room via Gaitronics to verify that RE 8446 was reset per initial cue or step signed for.

SAT UNSAT

2. PERFORMANCE STEP: Request Control Room stop EVS Fans 1 & 2.

STANDARD: Calls Control room from Gaitronics and requests that EVS Fans 1 & 2 be stopped.

Cue: As Control Room Operator, report that EVS Fans #1 & #2 have been stopped.

SAT UNSAT

3. PERFORMANCE STEP: Reset Fuel Handling Area Exhaust Fan 1 automatic trip
____C____

STANDARD: Rotate HIS 5400 to STOP.

CUE: HIS 5400 has been rotated to the STOP position and released. Green flag shown, green light on.

NOTE: As found condition: green light on, and red flag on switch indicated.

SAT UNSAT

-
4. PERFORMANCE STEP: Reset Fuel Handling Area Exhaust Fan 2 automatic trip
____C____

STANDARD: Rotate HIS 5401 to STOP

CUE: **HIS 5401 has been rotated to the STOP position and released. Green flag shown, green light on.**

NOTE: As found condition: Green light on and green flag indicated.

SAT UNSAT

-
5. PERFORMANCE STEP: Reset Fuel Handling Area Exhaust Fans 1 and 2 automatic trips
____C____

STANDARD: Depress NV 8446, green push button is depressed.

CUE: **NV 8446 has been depressed and released, hear air solenoids reset.**

SAT UNSAT

-
6. PERFORMANCE STEP: Reset Fuel Handling Area Exhausts 1 and 2 automatic trips
____C____

STANDARD: Depress NV 8447, green push button is depressed.

CUE: **NV 8447 has been depressed and released, hear air solenoids reset.**

SAT UNSAT

-
7. PERFORMANCE STEP: Start Fuel Handling Area Exhaust Fan 1
____C____

STANDARD: Rotate HIS 5400 to START

CUE: **HIS 5400 has been rotated to the START position and released. After short time delay RED light ON, GREEN light OFF for Fuel Handling Area Exhaust Fan 1.**

(If asked) HIS 5400A RED light ON, GREEN light is OFF for damper HV 5400A. (Position indicated below fan).

SAT UNSAT

-
8. PERFORMANCE STEP: Verify HA 5430A, Fuel Handling Area Vent to EVS Damper closes.

STANDARD: Verify HIS 5430A GREEN light LIGHTS

CUE: **HIS 5430A GREEN light LIGHTS, RED light goes OFF**

SAT UNSAT

9. PERFORMANCE STEP: Verify HA 5430B, Fuel Handling Area Vent to EVS Damper closes

STANDARD: Verify HIS 5430B GREEN light LIGHTS

CUE: **HIS 5430B GREEN light LIGHTS, RED light goes OFF**

SAT UNSAT

10. PERFORMANCE STEP: Verify Fuel Handling Area Exhaust Fan 1 starts

STANDARD: Verify HIS 5400 RED light LIGHTS

CUE: **HIS 5400 RED light lights, GREEN light goes OFF**

SAT UNSAT

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

END TIME

Verification of Completion

Job Performance Measure No. K

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: _____