

FINAL AS ADMINISTERED NRC-AUTHORED

ADMINISTRATIVE JPMS

FOR THE D. C. COOK INITIAL EXAMINATION - MAY 2001

Facility: D.C. Cook

Task No: _____

Task Title: SHUTDOWN BORON CALCJob Performance Measure No: SRO/RO – A.1.aK/A Reference: 004 K5.19 3.5/3.9

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance: Actual Performance: Classroom: Simulator: Plant:

Task Standard: DETERMINE REACTOR SHUTDOWN BORON IS NOT MET AND THAT NORMAL BORATION IS REQUIRED

Required Materials: UNIT 2 TECH DATA BOOK, 02-OHP.4021.001.012 ATTACHMENT 1

General References: 02-OHP.4021.001.012

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: UNIT 2 TRIPPED 1 HOUR AGO FROM 100% STEADY STATE POWER. RCS T_{AVE} IS 547° F AND PRESSURE IS 2250 PSIG AND STABLE. RCS BORON CONCENTRATION IS 620 PPM PER THE CHEMISTRY SAMPLE 30 MINUTES AGO. ROD H-8 AND M-4 ARE STUCK OUT OF THE CORE. THE PPC IS UNAVAILABLE, REACTOR ENGINEERING REPORTS THAT CORE BURNUP IS 16.4 GWD/MTU. P-11 & 12 BLOCKED LIGHTS ARE NOT LIT. THE UNIT IS TO REMAIN IN THE PRESENT CONDITION UNTIL AN ACTION PLAN IS DEVELOPED. CURRENT SHUTDOWN MARGIN REQUIREMENTS ARE MET.

Initiating Cue: YOU ARE TO PERFORM A MANUAL SHUTDOWN BORON CALCULATION FOR THE PLANT CONDITIONS 31 HOURS AFTER SHUTDOWN USING 02-OHP.4021.001.012 ATTACHMENT 1.

Time Critical Task: YES/NO

Validation Time: 40 MINUTES

PERFORMANCE INFORMATION

(Denote critical steps with **BOLD**)

Performance step: 1

SAT/UNSAT

4.1 ENTER CYCLE DATA

Standard:

ENTER CYCLE 12 USING THE TECHNICAL DATA BOOK (TDB) AND THE DATE AND TIME OF THE SHUTDOWN

Comment:

Performance step 2

SAT/UNSAT

4.2 ENTER SHUTDOWN MARGIN EXPIRATION

Standard:

ENTER THE DATE AND TIME THAT FOLLOWS THE UNIT SHUTDOWN BY 31 DAYS

CUE: OPTIONAL XENON IS NOT TO BE USED

Comment:

Performance step: 3 **CRITICAL STEP**

SAT/UNSAT

4.3 ENTER CORE BURNUP DATA

Standard:

ENTER THE DATA PROVIDED BY THE REACTOR ENGINEER

Comment:

Performance step: 4 **CRITICAL STEP**

SAT/UNSAT

4.4 ENTER PLANT CONDITIONS FOR WHICH SHUTDOWN MARGIN IS BEING CALCULATED

Standard:

**ENTER RCS TEMPERATURE AND
CHECK THE BLOCKS FOR P-11 AND/OR P-12 SAFEGUARDS BLOCKED AS 'NO' AND
UNIT IN MODE 4 OR 5 (BORON PENALTY) AS 'NO'**

Comment:

Performance step: 5

SAT/UNSAT

MARK 4.5 AS N/A

Standard:

SECTION 4.5 IS MARKED N/A

Comment:

Performance step: 6 **CRITICAL STEP**

SAT/UNSAT

4.6 CALCULATE UNCORRECTED MINIMUM BORON CONCENTRATION

Standard:

**USE THE $T_{AVE} > 541^{\circ}$ F CURVE
ENTER THE UNCORRECTED MINIMUM BORON CONCENTRATION PPM
RANGE IS 670 – 710 PPM**

Comment:

Performance step: 7

SAT/UNSAT

4.7 DETERMINE THE CORRECTION FOR STUCK OUT RODS

Standard:

DETERMINE THE WORTH OF A SINGLE ROD STRUCK OUT FROM TDB FIGURE 1.3b AND MULTIPLY BY 2 FOR TOTAL PCM
RANGE IS 1240 ± 5 PPM FOR EACH ROD OR 2480 ± 10 PPM FOR 2 RODS

Comment:

Performance step: 8 **CRITICAL STEP**

SAT/UNSAT

4.8 ENTER CORRECTED XENON CORRECTION DATA

Standard:

ENTER 0 FOR THE XENON REACTIVITY VALUE FOR THE 31st HOUR FOLLOWING THE UNIT SHUTDOWN

CUE:

Comment:

Performance step: 9 **CRITICAL STEP**

SAT/UNSAT

4.9.1 CALCULATE TOTAL CORRECTION FOR THE MINIMUM BORON CORRECTION

Standard:

ADD THE TOTAL STUCK OUT ROD WORTH AND XENON REACTIVITY TO GET THE TOTAL REACTIVITY CORRECTION

Comment:

Performance step: 10

SAT/UNSAT

4.9.2 DETERMINE THE BORON WORTH

Standard:

USE THE TDB FIGURE WITH THE NEAREST LOWER TEMPERATURE TO OBTAIN THE BORON WORTH. RANGE IS $-10.3 \pm .05$ PCM/PPM

CUE: THE RECTOR ENGINEER GAVE THE GWD/MTU IN THE INITIAL CONDITIONS.

NOTE: THE CANDIDATE IS TO USE THE EOC CURVE ON FIGURE 4.1.b

Comment:

Performance step: 11 **CRITICAL STEP**

SAT/UNSAT

4.9.3 CALCULATE THE DELTA BORON WORTH

Standard:

DIVIDE THE COMBINED REACTIVITY BY BORON WORTH

Comment:

Performance step: 12 **CRITICAL STEP**

SAT/UNSAT

4.9.4 CALCULATE THE ADJUSTED BORON CONCENTRATION

Standard:

SUBTRACT THE DELTA BORON FROM THE UNCORRECTED MINIMUM BORON CONCENTRATION

Comment:

Performance step: 13 **CRITICAL STEP**

SAT/UNSAT

4.9.5 DETERMINE THE ADJUSTED BORON WORTH

Standard:

USE THE TDB FIGURE WITH THE NEAREST HIGHER TEMPERATURE TO CALCULATE THE ADJUSTED BORON WORTH. RANGE IS $-9.9 + .05$ PCM/PPM

Comment:

Performance step: 14

SAT/UNSAT

4.9.6 CALCULATE THE CORRECTION FOR MINIMUM BORON

Standard:

DIVIDE COMBINED REACTIVITY BY THE ADJUSTED BORON WORTH

Comment:

Performance step: 15 **CRITICAL STEP**

SAT/UNSAT

4.9.7 CALCULATE THE CORRECTED MINIMUM BORON CONCENTRATION

Standard:

SUBTRACT THE CORRECTION FOR MINIMUM BORON FROM THE UNCORRECTED MINIMUM BORON CONCENTRATION

Comment:

Performance step: 16 **CRITICAL STEP**

SAT/UNSAT

4.10 DETERMINE THE MINIMUM RCS BORON REQUIRED

Standard:

ENTER THE MINIMUM RCS BORON CONCENTRATION REQUIRED

Comment:

Performance step: 17

SAT/UNSAT

4.11 RECORD THE CURRENT RCS BORON CONCENTRATION

Standard:

RECORD THE CURRENT RCS BORON CONCENTRATION AS DETERMINED FROM CHEMISTRY SAMPLING AND THE SAMPLE DATE AND TIME

Comment:

Performance step: 18 **CRITICAL STEP**

SAT/UNSAT

4.12 CALCULATE THE BORATION REQUIREMENT

Standard:

SUBTRACT THE RCS BORON CONCENTRATION FROM THE MINIMUM RCS BORON REQUIRED AND DETERMINE THAT A NORMAL BORATION IS REQUIRED BECAUSE CURRENT SDM IS MET.

Comment:

Performance step: 19

SAT/UNSAT

COMPLETE THE SIGNATURE AND DATE

Standard:

SIGN CALCULATED BY AND ENTER THE DATE AND TIME OF THE CALCULATION

Comment:

Terminating cue: THE JPM IS COMPLETE WHEN THE CANDIDATE TURNS IN THE PAPER

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO/RO – A.1.a

Examinee's Name:

Examiner's Name:

Date performed:

Facility Evaluator:

Number of attempts:

Time to complete:

Question Documentation:

Question: _____

Response: _____

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions: UNIT 2 TRIPPED FROM 100% STEADY STATE POWER 1 HOUR AGO. RCS T_{AVE} IS 547° F AND PRESSURE IS 2250 PSIG AND STABLE. RCS BORON CONCENTRATION IS 620 PPM PER THE CHEMISTRY SAMPLE 30 MINUTES AGO. ROD H-8 AND M-4 ARE STUCK OUT OF THE CORE. THE PPC IS UNAVAILABLE, REACTOR ENGINEERING REPORTS THAT CORE BURNUP IS 16.4 GWD/MTU. P-11 & 12 BLOCKED LIGHTS ARE **NOT** LIT. THE UNIT IS TO REMAIN IN THE PRESENT CONDITION UNTIL AN ACTION PLAN IS DEVELOPED. CURRENT SHUTDOWN MARGIN REQUIREMENTS ARE MET.

Initiating Cue: YOU ARE TO PERFORM A MANUAL SHUTDOWN BORON CALCULATION FOR THE PLANT CONDITIONS 31 HOURS AFTER SHUTDOWN USING 02-OHP.4021.001.012 ATTACHMENT 1.

Facility: D.C. Cook

Task No: _____

Task Title: Shift TurnoverJob Performance Measure No: SRO/RO-A.1.bK/A Reference: G.2.1.3 3.0/3.4

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance: Actual Performance: Classroom: Simulator: Plant:

Task Standard: PERFORM A SHIFT TURNOVER REVIEW ALL APPROPRIATE DOCUMENTS AND IDENTIFY ALL ERRORS ON THE CONTROL BOARD

Required Materials: OHI-4012, DATA SHEET 7 AND 8,

General References: OHI-4012

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: YOU ARE THE RELIEVING UNIT SRO/RO. YOU ARE RELIEVING THE WATCH YOU WERE ON 12 HOURS AGO. UNIT 2 IS IN MODE AT 8 - 10% POWER.

Initiating Cue: PERFORM A COMPLETE SHIFT TURNOVER OF YOUR RO (US) WATCH STATION. YOU WILL BE GIVEN 15 MINUTES FOR THE WALKDOWN THE FLUX & ROD CONTROL, RCP, CVCS, PZR, RHR, SI, CTS, AND SW PANELS. WHEN YOU ARE FINISHED WE WILL DISCUSS ANY DISCREPANCIES OR PROBLEMS NOTED. YOU ARE RELIEVING THE WATCH YOU WERE ON 12 HOURS AGO. UNIT 2 IS IN MODE 8 - 10% POWER.

Time Critical Task: YES/NO

Validation Time: 25 MINUTES

 PERFORMANCE INFORMATION

(Denote critical steps with **BOLD**)

Performance step: 1

SAT/UNSAT

ENTER OHI-4-12

Standard:

LOCATE AND OPEN OHI-4012 TO THE CORRECT DATA SHEET (7 FOR SRO) (8 FOR RO)

CUE: HAND OHI-4012 DATA SHEET TO THE APPLICANT

Comment:

Performance step 2 **CRITICAL STEP**

SAT/UNSAT

DISCUSS THE APPLICABLE UNIT LOGS THAT WOULD BE REVIEWED SINCE THE LAST WATCH STOOD

Standard:

RO	US	STANDING ORDERS,
RO	US	CONTROL ROOM NARRATIVE LOGS, (LAST 12 HOURS AGO)
RO	US	BLOCKED ALARM LOG,
RO	US	OPEN ITEM LOG,
RO	US	TEMP MOD LOG,
RO	US	UNIT SUPERVISOR TURNOVER CHECKLIST,
RO	US	PLAN OF THE DAY,
RO	US	INCOMPLETE STATUS REPORTS (RO ONLY),
	US	ABNORMAL POSITION LOG (SRO ONLY),
	US	COOK PLANT DAILY STATUS REPORTS (SRO ONLY),
	US	SHIFTLY RISK ASSESSMENT/GOVERNING PROCEDURE (SRO ONLY)

Comment:

Performance step: 3 **CRITICAL STEP**

SAT/UNSAT

TOUR THE MAIN CONTROL ROOM/WALKDOWN THE BOARDS

Standard:

CONTROL ROOM BOARDS WALKDOWN THE FLUX & ROD CONTROL, RCP, CVCS, PZR, RHR, SI, CTS, AND SW PANELS AND ALL ERRORS FOUND. RO'S WILL ADVISE OF TECH SPECS, SRO'S WILL EVALUATE TECH SPECS

THE FOLLOWING ITEMS WILL BE WRONG:

ACCUMULATOR #3 PRESSURE 500 PSIG – 1 HOUR T.S. 3.5.1, RESTORE PRESSURE \geq 585 PSIG

CONTROL ROD A1 IS 18 STEPS OUT OF ALIGNMENT FOR BANK – 1 HOUR T.S. 3.1.3 FIGURE 3.1-4, SDM VERIFY $>$ 12 STEPS OUT

SI CROSS CONNECT VALVE IS SHUT (IMO-275) – 1 HOUR TO REDUCE POWER, T.S. 3.5.2

RWST LEVEL 70% - 1 HOUR T.S. 3.5.5 VERIFY WATER SOURCE, RWST \geq 89%

RWST VALVES TO CCPS (IMO-910 & 911) TAGGED SHUT – 1 HOUR T.S. 3.1.2.2, FLOW PATH FROM RWST TO CCP TO RCS AND T.S. 3.0.3

NOTE: THE SAFETY SIGNIFICANCE AND TECH SPEC ISSUE OF THE PROBLEMS MUST BE DISCUSSED BY THE RO AND ANALYZED BY THE SRO TO RECEIVE FULL CREDIT FOR EACH FAULT THAT IS IDENTIFIED, 4 OUT OF 5 FAULTS MUST BE FOUND TO PASS

Comment:

Performance step: 4

SAT/UNSAT

COMPLETE TURNOVER

Standard:

REFUSE TO TAKE THE TURNOVER UNTIL ITEMS ARE FIXED OR ADDRESSED

Comment:

Terminating cue:

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO/RO-A.1.b

Examinee's Name:

Examiner's Name:

Date performed:

Facility Evaluator:

Number of attempts:

Time to complete:

Question Documentation:

Question: _____

Response: _____

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions: YOU ARE THE RELIEVING UNIT SRO/RO. YOU ARE RELIEVING THE WATCH YOU WERE ON 12 HOURS AGO. UNIT 2 IS IN MODE AT 8 - 10% POWER.

Initiating Cue: PERFORM A COMPLETE SHIFT TURNOVER OF YOUR RO (US) WATCH STATION. YOU WILL BE GIVEN 15 MINUTES FOR THE WALKDOWN THE FLUX & ROD CONTROL, RCP, CVCS, PZR, RHR, SI, CTS, AND SW PANELS. WHEN YOU ARE FINISHED WE WILL DISCUSS ANY DISCREPANCIES OR PROBLEMS NOTED. YOU ARE RELIEVING THE WATCH YOU WERE ON 12 HOURS AGO. UNIT 2 IS IN MODE 8 – 10% POWER.

Facility: D.C. Cook

Task No: _____

Task Title: Surveillance ChecksJob Performance Measure No: SRO/RO-A.2K/A Reference: G.2.1.31 4.2/3.9

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance: Actual Performance: Classroom: Simulator: Plant: Task Standard: FIND ALL 5 PROBLEMS AND RECORD THE INFORMATION IN THE
CORRECT COLUMN.

Required Materials: 02-OHP.4030.STP.030 DATA SHEET 1 PAGES 11 - 16

General References: 02-OHP.4030.STP.030

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 AT 100% POWER ALL EQUIPMENT IS FUNCTIONING
PROPERLY ON MID-SHIFT**Initiating Cue:** YOU ARE TO COMPLETE STEPS 28 – 38 ON DATA SHEET 1 OF THE SHIFT
SURVEILLANCE CHECK AND REPORT ANY DISCREPANCIES.Time Critical Task: YES/NO

Validation Time: 20 MINUTES

PERFORMANCE INFORMATION

(Denote critical steps with **BOLD**)

Performance step: 1 (**CRITICAL STEP**)

SAT/UNSAT

OBTAIN A COPY OF 02-OHP.4030.STP.030

Standard:

OBTAIN A COPY OF 02-OHP.4030.030 AND FIND DATA SHEET 1

CUE: PROVIDE A COPY OF THE PARTIALLY COMPLETED DATA SHEET 1 WHEN THE CANDIDATE GETS THE PROPER PROCEDURE

Comment:

Performance step 2

SAT/UNSAT

VERIFY THAT THE DATA SHEET IS THE LATEST REVISION

Standard:

CHECK CONTROL COPY TO VERIFY REVISION IS THE LATEST

Comment:

Performance step: 3 **(CRITICAL STEP)**

SAT/UNSAT

RECORD THE INFORMATION

Standard:

**RECORD THE CORRECT INFORMATION IN THE PROPER COLUMN ON THE DATA SHEET
NOTE THE FOLLOWING READINGS OUT OF ACCEPTANCE CRITERION:**

31.1 CST LEVEL 2-CLI-113 39%

31.2 CST LEVEL 2-CLR-111 39%

33.0 4kV VITAL BUS T-21C 2-3 0 VOLTS

**38.0 RAD MONITOR CHANNEL CONTAINMENT AREA LOW RANGE 2-VRS-2201 FAILED
LOW**

38.0 RAD MONITOR CHANNEL STEAM GENERATOR PORV 2-MRA-2702 FAILED LOW

**NOTE: FOR EACH OF THE PROBLEMS FOUND THE OPERATOR IS TO INFORM THE US
AND ANOTHER OPERATOR WILL INVESTIGATE OR CALL MAINTENANCE.**

Comment:

Performance step: 4

SAT/UNSAT

REPORT COMPLETION OF TASK

Standard:

**REPORT COMPLETION OF TASK AND ANY INFORMATION THAT IS NOT WITHIN THE
ACCEPTANCE CRITERIA TO THE SHIFT MANAGER**

Comment:

Terminating cue:

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO/RO – A.2

Examinee's Name:

Examiner's Name:

Date performed:

Facility Evaluator:

Number of attempts:

Time to complete:

Question Documentation:

Question: _____

Response: _____

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions: PLANT IS AT 100% POWER ALL EQUIPMENT IS FUNCTIONING PROPERLY ON MID-SHIFT

Initiating Cue: YOU ARE TO COMPLETE STEPS 28 – 38 ON DATA SHEET 1 OF THE SHIFT SURVEILLANCE CHECK AND REPORT ANY DISCREPANCIES.

Facility: D.C. Cook

Task No: _____

Task Title: Review RWPJob Performance Measure No: RO – A.3K/A Reference: G.2.3.10 2.9/3.3

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance: Actual Performance: Classroom: Simulator: Plant:

Task Standard: CORRECTLY PREPARE TO GATHER THE DAMP WASTE MATERIAL FROM THE CONTAMINATED AREA

Required Materials: RWP 010509-01

General References: PMP-6010.RPP.066

Note: THE JPM WILL BE SETUP WITH THE ASSOCIATED RWP AND MATERIAL IN THE RP TRAINING AREA

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 AT 100% POWER.**Initiating Cue:** YOU ARE DIRECTED TO GATHER DAMP WASTE FOR PROCESSING FROM THE CONTAMINATED AREA USING RWP 010509-02.Time Critical Task: YES/NO

Validation Time: 20 MINUTES

PERFORMANCE INFORMATION

(Denote critical steps with **BOLD**)

Performance step: 1 **CRITICAL STEP**

SAT/UNSAT

DETERMINE WHICH RWP IS REQUIRED TO PERFORM THE JOB AND WHICH PATH IS ALARA TO RETRIEVE THE MATERIAL

Standard:

GETS RWP 010509-02 FROM RWP 010509 AND THE SURVEY MAP

CUE: HAND THE OPERATOR THE RWP AND SURVEY MAP WHEN THE CORRECT ONE IS LOCATED

Comment:

Performance step: 2

SAT/UNSAT

DETERMINE THAT THE AREA TO BE ENTERED IS A CONTAMINATED AREA

Standard:

AFTER REVIEW OF THE RWP AND THE SURVEY MAP THE OPERATOR DETERMINES THAT THE AREA IS A SURFACE CONTAMINATED AREA

Comment:

Performance step 3 (**CRITICAL STEP**)

SAT/UNSAT

BEGIN GATHERING ANTI-C

Standard:

BEGIN GATHERING ANTI-C FOR DRESS CODE 'M' AND SPECIAL INSTRUCTIONS 2 'W/DOUBLE GLOVES'

Comment:

Performance step: 4 (CRITICAL STEP)

SAT/UNSAT

GATHER WASTE COLLECTION BAGS

Standard:

GATHER WASTE COLLECTION BAGS THAT WILL CONTAIN THE DAMP MATERIAL

CUE: DETERMINE WHAT EQUIPMENT IS REQUIRED TO PERFORM THE JOB

Comment:

Performance step: 5 (CRITICAL STEP)

SAT/UNSAT

GATHER DOSIMETRY AND THE SETPOINTS

Standard:

OPERATOR DETERMINES THAT AN ALARMING DOSIMETER AND TLD ARE REQUIRED AND THAT THE DOSE ALARM IS SET AT 10 MREM AND DOSE RATE IS SET AT 50 MREM/HR

CUE: DETERMINE WHAT DOSIMETRY IS REQUIRED TO PERFORM THE JOB AND THE SETPOINTS

Comment:

Terminating cue:

VERIFICATION OF COMPLETION

Job Performance Measure No. RO – A.3

Examinee's Name:

Examiner's Name:

Date performed:

Facility Evaluator:

Number of attempts:

Time to complete:

Question Documentation:

Question: _____

Response: _____

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions: PLANT IS AT 100% POWER.

Initiating Cue: YOU ARE DIRECTED TO GATHER
DAMP WASTE FOR PROCESSING FROM THE
CONTAMINATED AREA USING RWP 010509-02.



Facility: D.C. Cook

Task No: _____

Task Title: Monitor Tank Release to CW - Review Job Performance Measure No: SRO – A.3K/A Reference: G.2.3.8 2.5/3.4

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:

Simulated Performance ___ Actual Performance Classroom Simulator Plant ___
Task Standard: Review all paperwork prior to the commencing a monitor tank release to the circ water system. Disapproves the release due to errors in the release permit.

Required Materials: 12-OHP.4021.006.004, Attachment 3, and Data Sheet No.1. 12 PMP-6010.OSD.001, "Off-Site Dose Calculation Manual."

General References: 12-OHP.4021.006.004

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: Both units are at approximately 100% power. You are the shift manager and your shift just took the watch. On your turnover you were informed that the Monitor Tank # 4 volume is approximately 22926.54 gallons and is required to be released through the circ water system via Unit 2 Condenser B. RP/Chemistry has taken samples of the Monitor Tank as required. Monitor Tank # 4 was recirculated and release lineup for Tank # 4 was completed satisfactorily as required. You were given the release package with the appropriate data sheets for Monitor Tank # 4 release. Today's date is Monday May 14, 2001, and the time is (use present time).

Initiating Cue: A monitor tank release to the circ water system from tank # 4 is required. You have been handed the release package. You are to review the release package and complete Data Sheet 1 to authorize Monitor Tank # 4 for release in accordance with step 4.5.4 of Attachment 3 of procedure 12-OHP.4021.006.004. Attachment 3 is completed to step 4.5.3.

Note: Assume RP/Chemistry sample measurements for isotope concentrations and math calculations are correct. Also, the Monitor Tank # 4 release valve lineup, lineup sheet No. 8 was satisfactorily completed.

Time Critical Task: YES/NO

Validation Time: 15 Minutes

 PERFORMANCE INFORMATION

(Denote critical steps with **BOLD**)

 Performance step: 1

SAT/UNSAT

Obtains liquid release procedure, 12-OHP.4021.006.004.

Standard:

Gets a copy of 12-OHP.4021.006.004, "Transferring Distillate from Monitor Tanks", Attachment 3, "Monitor Tank Release to the Circ Water System."

CUE: Hand the candidate a partially completed copy of Attachment 3 and Data Sheet 1.

Comment: Note, after receiving the initial conditions and cue, the applicant may also obtain procedure 12 PMP 6010 OSD.001, "Offsite Dose Calculation Manual." However, the applicant may obtain this procedure later on in the JPM performance.

 Performance step: 2 **CRITICAL STEP**

SAT/UNSAT

REVIEW Precautions and Limitations, Item 2.1:

Determines that the Monitor Tank # 4 volume has changed from the original release permit and after Chemistry took the sample analysis.

Standard:

Identifies that the volume change voids the release permit. The applicant should inform you that a new Release Permit must be resubmitted.

CUE: If identified and asked why the volume difference, inform the applicant that the turnover information he received from the last crew was in error. The last shift manager gave you the wrong tank volume. The correct volume for tank no. 4 was verified to be 19105.45 gallons.

Comment: Inform the applicant to continue with the release approval.

 Performance step 3

SAT/UNSAT

REVIEW STEP 4.5.4 item 1, check release valve lineup sheet (No. 8) is completed.

Standard:

Verifies that step 4.5.1 is marked for Lineup Sheet No. 8 and initialed by two independent operators.

CUE: Inform the applicant that Release Valve Lineup Sheet No. 8 is satisfactorily completed and reviewed.

Comment: Inform applicant that the valve lineup is sat, and continue with the release approval.

Performance step: 4 **CRITICAL STEP**

SAT/UNSAT

REVIEW STEP 4.5.4 item 2, that plant conditions as required for a radioactive release, as specified by the ODCM, have been met. The ODCM requirements pertaining to inoperable RRS-1001.

Standard:

Identifies ODCM requirements per Attachment 3.2, Radioactive Liquid Effluent Monitoring Instruments, Item 1.a, Liquid Radwaste Effluent line (RRS-1001), ACTION STATEMENT 1, are NOT MET.

Identifies:

- **Need at least two independent samples analyzed – NOT MET. Only one sample analysis attached to release package.**
- **Need at least two technically qualified operators for independent verification of discharge lineup - MET.**

Cue: Inform the applicant that Chemistry forgot to attach the second sample analysis document with the release package. A second sample analysis was verified satisfactory.

Comment: Inform the applicant to continue with the release approval.

Performance step: 5 **CRITICAL STEP**

SAT/UNSAT

REVIEW STEP 4.5.4 item 3, that 24 hours have NOT elapsed since Chemistry approval for release.

Standard:

Determine that it has been greater than 24 hours since Data Sheet 1 Section 2.0 Chemistry approval. Candidate determines that the 24 hours time limit was exceeded and disapproves the evolution.

CUE: Acknowledge the excess time limit and inform the applicant that Chemistry will be informed to start another sample analysis for a new release permit.

Comment: The applicant identifies the errors associated with the release package and disapproves the evolution.

Terminating cue: Acknowledge the excess time limit and inform the applicant that Chemistry will be informed to start another sample analysis for a new release permit. That completes this JPM.

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO – A.3

Examinee's Name:

Examiner's Name:

Date performed:

Facility Evaluator:

Number of attempts:

Time to complete:

Question Documentation:

Question: _____

Response: _____

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions: Both units are at approximately 100% power. You are the shift manager and your shift just took the watch. On your turnover you were informed that the Monitor Tank # 4 volume is approximately 22926.54 gallons and is required to be released through the circ water system via Unit 2 Condenser B. RP/Chemistry has taken samples of the Monitor Tank as required. Monitor Tank # 4 was recirculated and release lineup for Tank # 4 was completed satisfactorily as required. You were given the release package with the appropriate data sheets for Monitor Tank # 4 release. Today's date is Monday May 14, 2001, and the time is (use present time).

Initiating Cue: A monitor tank release to the circ water system from tank # 4 is required. You have been handed the release package. You are to review the release package and complete Data Sheet 1 to authorize Monitor Tank # 4 for release in accordance with step 4.5.4 of Attachment 3 of procedure 12-OHP.4021.006.004. Attachment 3 is completed to step 4.5.3.

Note: Assume RP/Chemistry sample measurements for isotope concentrations and math calculations are correct. Also, the Monitor Tank # 4 release valve lineup, lineup sheet No. 8 was satisfactorily completed.

Facility: D.C. Cook

Task No: _____

Task Title: EPlan CommunicationsJob Performance Measure No: RO - A.4K/A Reference: G.2.4.43 2.8/3.5

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance: Actual Performance: Classroom: Simulator: Plant:

Task Standard: CORRECTLY COMMUNICATE NOTIFICATIONS WITHIN THE REQUIRED TIME

Required Materials: PMP 2080.EPP.107; DATA SHEET 1, DATA SHEET 2, DATA SHEET 3

General References: PMP 2080.EPP.107

READ TO THE EXAMINEE

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

Initial Conditions: A GENERAL EMERGENCY HAS BEEN DECLARED FOR UNIT 2. YOU HAVE BEEN DIRECTED BY THE SHIFT MANAGER/SEC. TO MAKE ALL APPROPRIATE INITIAL OFFSITE NOTIFICATIONS

Initiating Cue: YOU ARE TO PERFORM THE INITIAL OFFSITE NOTIFICATION PER PMP 2080.EPP.107 PER STEP 3.2.3 AND 3.2.6 TO THE LOCAL, STATE, AND NRC

Time Critical Task: YES / NO

15 MINUTES TO COMPLETE NOTIFICATIONS TO BERRIEN COUNTY SHERIFF'S DEPARTMENT AND MICHIGAN STATE POLICE, 1 HOUR FOR THE NRC

Validation Time: 8 MINUTES

PERFORMANCE INFORMATION

(Denote critical steps with **BOLD**)

Performance step: 1

SAT/UNSAT

Enter PMP-2080.EPP.106

Standard: LOCATE AND OPEN PMP 2080.EPP.106

CUE: GIVE THE APPLICANT THE EPP.106 DATA SHEETS WITH SHEET 1 AND THE TOP SECTION OF SHEET 2 COMPLETED.

Comment:

Performance step 2 (**CRITICAL STEP**)

SAT/UNSAT

CONTACT THE AGENCIES IAW STEP 3.4.1 (STATE AND LOCAL NOTIFICATION) & 3.4.2 (NRC NOTIFICATION)

Standard:

THE COUNTY AND STATE ARE CONTACTED WITHIN 15 MINUTES OF THE START OF THE JPM AND THE NRC IS NOTIFIED IMMEDIATELY AFTER THE LOCAL AGENCIES AND NOT LATER THAN 1 HOUR AFTER THE START OF THE JPM

CUE: ANSWER AS:

DAVE MARS FOR THE BERRIEN COUNTY SHERIFF

JOHN SMITH FOR THE MICHIGAN STATE POLICE

JOHN MacKINNON FOR THE NRC OPERATIONS CENTER

NOTE: IF THE CANDIDATE IS NOT MAKING PROGRESS WITH THE NRC NOTIFICATIONS TIME COMPRESS TO STATE THAT IT HAS BEEN 50 MINUTES.

Comment:

Performance step: 3 (**CRITICAL STEP**)

SAT/UNSAT

COMMUNICATE INFORMATION TO THE LOCAL AGENCIES AND THE NRC

Standard:

MESSAGE IS COMMUNICATED USING DATA SHEET 1, EXHIBIT A TO THE LOCAL AGENCIES AND DATA SHEET 4, EXHIBIT D TO THE NRC

Comment:

Performance step: 4 (CRITICAL STEP)

SAT/UNSAT

COMPLETE APPLICABLE SECTIONS OF DATA SHEET 2, EXHIBIT B

Standard:

**COMPLETE THE 'CONTACT ESTABLISHED' COLUMN OF DATA SHEET 2, EXHIBIT B
WITH INITIALS AND TIME AND THE PERSON CONTACTED AT EACH AGENCY**

Comment:

Terminating cue:

VERIFICATION OF COMPLETION

Job Performance Measure No. RO – A.4

Examinee's Name:

Examiner's Name:

Date performed:

Facility Evaluator:

Number of attempts:

Time to complete:

Question Documentation:

Question: _____

Response: _____

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions: A GENERAL EMERGENCY HAS BEEN DECLARED FOR UNIT 2. YOU HAVE BEEN DIRECTED BY THE SHIFT MANAGER/SEC. TO MAKE ALL APPROPRIATE INITIAL OFFSITE NOTIFICATIONS

Initiating Cue: YOU ARE TO PERFORM THE INITIAL OFFSITE NOTIFICATION PER PMP 2080.EPP.107 PER STEP 3.2.3 AND 3.2.6 TOO THE LOCAL, STATE, AND NRC

Facility: D.C. Cook

Task No: _____

Task Title: Make Classification and PARJob Performance Measure No: SRO A.4K/A Reference: G.2.4.44 2.1/4.0

Examinee: _____

NRC Examiner: _____

Facility Evaluator: _____

Date: _____

Method of testing:Simulated Performance: Actual Performance: Classroom: Simulator: Plant:

Task Standard: CLASSIFY THE EVENT AS A GENERAL EMERGENCY AND PROVIDE THE CORRECT PROTECTIVE ACTION RECOMMENDATION, DOCUMENT CLASSIFICATION AND PAR ON 'REQUIRED INFORMATION' SECTION OF ACCIDENT NOTIFICATION FORM

Required Materials: PMP.2080.EPP.101, EPP.105, and EPP.108

General References: PMP.2080

READ TO THE EXAMINEE

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

Initial Conditions: A LARGE BREAK LOCA HAS OCCURRED ON UNIT 2. THE FOLLOWING CONDITIONS EXIST:

- CONTAINMENT PRESSURE IS 4.2 PSIG
- CONTAINMENT ARE A HIGH RAD MONITOR S ARE READING 6.4E4 R.HR
- CORE EXIT THERMOCOUPLES ARE READING 725 DEGREES AND INCREASING
- WINDS ARE STEADY AT 15 MPH AT 300 DEGREES
- A REPORT WAS RECEIVED AND CONFIRMED THAT CONTAINMENT PENETRATION NODE CPN-71 IS LEAKING
- SITE BOUNDARY DOSE IS 2.6 REM TEDE AND 4.8 REM THYROID CDE
- 10 MILE DOSE IS 0.78 REM TEDE AND 2.7 REM THYROID

Initiating Cue: USING THE PLANT CONDITIONS, MAKE ANY NECESSARY E-PLAN RECOMMENDATIONS

Time Critical Task: YES NO

Validation Time: 15 MINUTES

PERFORMANCE INFORMATION

(Denote critical steps with **BOLD**)

Performance step: 1 **CRITICAL STEP**

SAT/UNSAT

OBTAIN PMP 2080.EPP.101 AND REFER TO ATTACHMENT 1, EMERGENCY CONDITION CATEGORIES

Standard:

CANDIDATE GETS A COPY OF THE PROCEDURE AND REFERS TO THE ATTACHMENT

CUE: GIVE A COPY OF THE ATTACHMENT TO THE CANDIDATE

Comment:

Performance step 2 **CRITICAL STEP**

SAT/UNSAT

COMPARE THE INITIAL CONDITIONS TO THE CATEGORIES

Standard:

DECLARE A GENERAL EMERGENCY BASED ON CATEGORIES 1.2L, 2.1L, 2.3L, AND 3.2L OR 3.2P.

NOTE: THE DECLARATION IS BASED ON 2 L's AND 1 P. OR ON 3 L's IN COMBINATION ACCORDING TO EPP.101.

Comment:

Performance step: 3 **CRITICAL STEP**

SAT/UNSAT

OBTAIN A COPY OF PMP.2080.EPP.100, GENERAL EMERGENCY

Standard:

OBTAINS A COPY OF PMP.2080.EPP.100

CUE: HAND THE CANDIDATE A COPY OF EPP.100

Comment:

Performance step: 4 **CRITICAL STEP**

SAT/UNSAT

DETERMINE THE NEED TO PERFORM A DOSE ASSESSMENT USING EPP.108, INITIAL DOSE ASSESSMENT

Standard:

GET A COPY OF EPP.108 TO PERFORM A DOSE ASSESSMENT

CUE: HAND THE CANDIDATE A COPY OF THE DOSE ASSESSMENT PRINTOUT

Comment:

Performance step: 5 **CRITICAL STEP**

SAT/UNSAT

USE THE PRINTOUT AND EPP.100

Standard:

RECOMMEND THE EVACUATION OF AREAS 1, 2, AND 3 (OR SECTIONS E, F, AND G TO 5 MILES)

Comment:

Terminating cue: JPM IS TERMINATED WHEN THE CANDIDATE HAND IN THE RECOMMENDATION

VERIFICATION OF COMPLETION

Job Performance Measure No. SRO A.4

Examinee's Name:

Examiner's Name:

Date performed:

Facility Evaluator:

Number of attempts:

Time to complete:

Question Documentation:

Question: _____

Response: _____

Result: SAT or UNSAT

Examiner's signature and date: _____

Initial Conditions: A LARGE BREAK LOCA HAS OCCURRED ON UNIT 2. THE FOLLOWING CONDITIONS EXIST:

- CONTAINMENT PRESSURE IS 4.2 PSIG
- CONTAINMENT ARE A HIGH RAD MONITOR S ARE READING $6.4E4$ R.HR
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Initiating Cue: USING THE PLANT CONDITIONS, MAKE ANY NECESSARY E-PLAN RECOMMENDATIONS