

## JOB PERFORMANCE MEASURE

### TASK CONDITIONS:

1. You are the Unit 1 Assist NSO.
2. The unit is at 95.0% power.
3. Control Bank D is at 220 steps.
4. Boron concentration is 700 ppm per sample 30 minutes ago.
5. Tave is 580°F.
6. Reactor average burn-up is 6500 EFPD, MOL.  
(RRD, 1BGP 100-7T1 is provided)

### INITIATING CUES:

1. **It has just been determined** that control rod K-4 is inoperable and is untrippable as the result of excessive friction.
2. The Unit Supervisor instructs you to perform 1BOSR 1.1.1-1, Shutdown Margin Surveillance and determine if Shutdown Margin is met at time of trip.
3. **This is a time critical JPM.**

## JOB PERFORMANCE MEASURE

Rev. 6,3/24/2006

TASK TITLE: Perform Shutdown Margin Calculations

JPM No.: Admin 1.a

TPO No: IV.C.QG-03

K&A No.: 2.1.25

K&A IMP. 2.8/3.1

TRAINEE: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

The Trainee: PASSED \_\_\_\_\_ this JPM

TIME STARTED: \_\_\_\_\_

FAILED \_\_\_\_\_

TIME FINISHED: \_\_\_\_\_

EVALUATION METHOD: PERFORM \_\_\_\_\_ SIMULATE \_\_\_\_\_

LOCATION: IN PLANT \_\_\_\_\_

MATERIALS: Copy of 1BOSR 1.1.1-1; 1BGP 100-7T1, RRD completed

### GENERAL REFERENCES:

1. Tech Spec 3.1.4, Condition A
2. 1BOSR 1.1.1-1, Shutdown Margin Surveillance (Rev. 10)
3. 1BGP 100-7TI, Reference Reactivity Data Worksheet (Rev.7)
4. BCB-1, Byron Unit 1 Cycle 14 Curve Book, Fig 8B, Tbl 1-1, Tbl 1-2, Tbl 1-4, Tbl 1-5, Tbl 1-6
5. Unit 1 Core Operating Limits Report (Rev 2)

### TASK STANDARDS:

Perform the actions necessary to complete a shutdown margin surveillance while at power

### TASK CONDITIONS:

1. You are the Unit 1 Assist NSO.
2. The unit is at 95.0% power.
3. Control Bank D is at 220 steps.
4. Boron concentration is 700 ppm per sample 30 minutes ago.
6. Tave is 580°F.
7. Reactor ave burn-up is 6500 EFPH, MOL. (RRD, 1BGP 100-7T1 is provided)

### INITIATING CUES:

1. **It has just been determined** that control rod K-4 is inoperable and is untrippable as the result of excessive friction.
2. The Unit Supervisor instructs you to perform 1BOSR 1.1.1-1, Shutdown Margin Surveillance and determine if Shutdown Margin is met at time of trip.
3. **This is a time critical JPM.**

CRITICAL ELEMENTS: (\*) 3, 4, 5, 6, 7, 8, 9, 10 & 11 and completion within 1 hour.

**RECORD START TIME** \_\_\_\_\_

**Note:**

JPM task conditions and initiating cues provide the values for core average burnup (6500), RCS Tave (580), RCS boron concentration (700), and total inoperable control rods (1).

- |   |  |   |   |   |
|---|--|---|---|---|
| 1. Refer to 1BOSR 1.1.1-1, Shutdown Margin Surveillance | <ul style="list-style-type: none"> <li>◦ OPEN 1BOSR 1.1.1-1</li> <li>◦ Go to step F.4 (F.1.a)</li> </ul> | o | o | o |
|---|--|---|---|---|

- |                       |         |   |   |   |
|-----------------------|---------|---|---|---|
| 2. Present conditions | RECORD: | o | o | o |
|-----------------------|---------|---|---|---|

- Time and date (F.4.a)
- Core average burnup (F.4.b)
- RCS average temperature (F.4.c)
- RCS boron concentration (F.4.d)
- Total inoperable control rods (F.4.e)
- Required SDM from COLR (F.4.f)

**Note: The procedure expects 557 °F for Tave when in Mode 1 or 2**

**Note: Required SDM from COLR is 1.3% DK/K = 1300 pcm**

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARDS</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
*3. Bounding assumptions	<ul style="list-style-type: none"> <li>◦ DETERMINE and RECORD bounding core average temperature (F.5.a)</li> <li>◦ RECORD most limiting core average temperature (F.5.b)</li> <li>◦ DETERMINE and RECORD bounding time and date (F.5.c)</li> </ul>	0	0	0
<b>Note: 557 °F is the most limiting core average temperature</b>				
*4. Minimum Required Boron Concentration	<ul style="list-style-type: none"> <li>◦ DETERMINE and RECORD Minimum Required Boron Concentration from BCB-1 Table 1-1 (F.6.a)</li> <li>◦ Go to step F.7 (F.6.b)</li> </ul>	0	0	0
*5. Reactivity Worth of Boron	<p>Record:</p> <ul style="list-style-type: none"> <li>◦ Integral Boron Worth from 1BCB-Table 1-5 at limiting core avg temperature and current boron concentration (F.7.a.1))</li> <li>◦ Integral Boron Worth from 1BCB-Table 1-5 at limiting core avg temperature and minimum required boron concentration (F.7.a.2))</li> <li>• Calculate net Boron Reactivity Worth. (F.7.b)</li> </ul>	0	0	0

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

**Note:**

For the purposes of this JPM, a Qualified Nuclear Engineer is not to be available.

*6.	Reactivity Worth of Untriappable Rods	Record: <ul style="list-style-type: none"><li>◦ Number of inoperable control rods (1) (F.8.a)</li><li>◦ Predicted Most-reactive rod worth from 1BCB-Table 1-6</li><li>• Calculate Reactivity Worth of Untriappable Rods (F.8.b)</li></ul>	0	0	0
*7.	Reactivity Change due to Xenon	• Determine Xenon Worth using RRD and BCB-1 Figure 8C or Table 1-2 (F.9.a,b,c)	0	0	0
*8.	Reactivity Worth of Samarium	• Determine Samarium Worth using RRD and BCB-1 Table 1-4 (F.10.a,b)	0	0	0
*9.	Correction for Boron effects on Xenon and Samarium	• Determine Fission Product Worth (F.11.a,b,c,d)	0	0	0
*10.	Determine available shutdown margin.	• Calculate available shutdown margin (F.12.a)	0	0	0

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

\*11. Determine acceptance criteria

- Determines acceptance criteria for Shutdown Margin is not met and calculated is less negative than -1300 pcm (F.12.c)

0

0

0

**Note: Examinee's calculated Shutdown Margin using BCB should be compared to Examiner's attached answer key**

RECORD STOP TIME \_\_\_\_\_

COMMENTS:

## JOB PERFORMANCE MEASURE

### TASK CONDITIONS:

1. You are the Unit Supervisor.
2. Unit 1 is in Mode 5 and Unit 2 is in Mode 1 at 100% power.
3. The following qualified people are inside the Protected Area as members of the oncoming shift operating crew: (Assume that **All LISTED** personnel have the same shift rotation)

Joe: Shift Manager

Sam: NSO

Terry: Chemistry

Bill: US

Sally: NLO

Tom: US

Ron: NLO

Andy: US

Al: NLO

Arnie: WEC/ STA

Mary: NLO

Dave: NSO

Bob: RP

### INITIATING CUES:

**Determine** if the crew meets the minimum staffing requirements for shift relief **AND provide recommendations**, if necessary, for additional staffing.

## JOB PERFORMANCE MEASURE

Rev 0, 03/22/06

TASK TITLE: Minimum Shift Staffing

JPM No.: Admin 1.b

TKO No: 7E.AM-057-A

K&A No.: 2.1.5

K&A IMP 3.4

TRAINEE: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

The Trainee: PASSED \_\_\_\_\_ this JPM

TIME STARTED: \_\_\_\_\_

FAILED \_\_\_\_\_

TIME FINISHED: \_\_\_\_\_

EVALUATION METHOD: PERFORM \_\_\_\_\_

SIMULATE \_\_\_\_\_

LOCATION: IN PLANT \_\_\_\_\_

SIMULATOR \_\_\_\_\_

### MATERIALS:

1. BAP 320-1 (Rev 17) Shift Staffing
2. Tech Specs Admin

### GENERAL REFERENCES:

BAP 320-1 (Rev 17) Shift Staffing

### TASK STANDARDS:

Determine if each individual crew position meets the minimum Tech Spec staffing and Desired staffing requirements for shift relief.

### TASK CONDITIONS:

1. You are the Shift Manager.
2. Unit 1 is in Mode 5 and Unit 2 is in Mode 1 at 100% power.
3. The following qualified people are inside the Protected Area as members of the oncoming shift operating crew: (Assume that **All LISTED** personnel have the same shift rotation)

Joe: Shift Manager

Sam: NSO

Mary: NLO

Bill: US

Dave: NSO

Bob: RP

Tom: US

Ron: NLO

Terry: Chemistry

Andy: US

Al: NLO

Arnie: WEC/ STA

Sally: NLO

### INITIATING CUES:

**Determine** if the crew meets the minimum staffing requirements for shift relief **AND provide** recommendations, if necessary, for additional staffing.

### CRITICAL ELEMENTS: (\*)

4, 8, 12, 15, 16 & 19

**Validation Time:** 20 minutes



PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

RECORD START TIME \_\_\_\_\_

1. Refer to BAP 320-1.

Determines that BAP 320-1 is needed to make determination.

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**Cue: Provide a copy of BAP 320-1 after correct procedure has been determined.**

**Cue: Prompt examinee to address Tech Spec requirements first.**

2. Review Tech Spec requirement for Shift Manager staffing.

Determines that the minimum Tech Spec staffing for Shift Manager **is** satisfied.

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3. Review Tech Spec requirement for Unit Supervisor staffing.

Determines that the minimum Tech Spec staffing for Unit Supervisor **is** satisfied.

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\*4. Review Tech Spec requirement for NSO staffing.

Determines that the minimum Tech Spec staffing for NSO **is NOT** satisfied.

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**Note: Examinee may state that this position may be filled by one of the extra US (SROs), then a callout to fill the position with an NSO will still be required, but the Tech Spec manning could be met in this manner.**

- o Recommend either using the extra US to relieve one NSO and **call out** a relief NSO **OR hold over at least one NSO** and **call out at least one NSO** for relief.

**Note: Recommendation may be given here or at step 8 of JPM.**

<u>PERFORMANCE CHECKLIST</u>	<u>STANDARDS</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
5. Review Tech Spec requirement for STA staffing.	Determines that the minimum Tech Spec staffing for STA <b>is</b> satisfied.	o	o	o
6. Review Tech Spec requirement for NLO staffing.	Determines that the minimum Tech Spec staffing for NLO <b>is</b> satisfied.	o	o	o
7. Review Tech Spec requirement for RP staffing.	Determines that the minimum Tech Spec staffing for RP <b>is</b> satisfied.	o	o	o
*8. Determines that oncoming crew does not meet Tech Spec requirement.	Takes immediate action to ensure NSO staffing meets the Tech Spec requirements.	o	o	o
<b>Note: Recommendations may have been given at step 4 of JPM.</b>	<ul style="list-style-type: none"> <li>Recommend either using the extra US to relieve one NSO and <b>call out</b> a relief <b>OR hold over at least one NSO</b> and <b>call out at least one NSO</b> for relief.</li> </ul>			
9. Review Desired Staffing requirement for Shift Manager.	Determine that minimum Desired Staffing for Shift Manager <b>is</b> satisfied.			

PERFORMANCE CHECKLIST

STANDARDS

SAT   UNSAT   N/A

10. Review Desired Staffing requirement for Unit Supervisor.

Determine that minimum Desired Staffing for Unit Supervisor **is** satisfied.

11. Review Desired Staffing requirement for WEC.

Determine that minimum Desired Staffing for WEC **is** satisfied.

**Note: Examinee may determine that the WEC is less important than having a FS. FS is usually the shift Fire Chief. A US could be assigned as the STA for the shift. The extra US could be used as the FS also.**

\*12. Review Desired Staffing requirement for FS.

Determine that minimum Desired Staffing for FS **is NOT** satisfied.

**Note: Examinee may recommend filling the FS position with the extra US. This position is usually Fire Chief qualified and would be so designated for the shift.**

- Recommend filling the FS position with the extra US **OR hold over FS, call out** a FS for relief. This position is usually Fire Chief qualified and would be so designated for the shift.

**Note: Recommendation may be given here or at step 19 of JPM.**

13. Review Desired Staffing requirement for NSO.

Determine that minimum Desired Staffing for NSO's **is NOT** satisfied.

**Note: Examinee may recommend filling one of the vacant NSO positions with the extra US. This will still require 2 NSOs to be called out, but only one NSO would be held over until a relief arrived.**

- Recommend filling one of the vacant NSO positions with the extra US (This will still require 2 NSO's to be called out, but only one NSO would be held over until a relief arrived) **OR hold over 2 NSO's and call out 2 NSO's** for relief.

**Note: Recommendation may be given here or at step 19 of JPM.**

PERFORMANCE CHECKLIST

STANDARDS

SAT   UNSAT   N/A

14. Review Desired Staffing requirement for STA.

Determine that minimum Desired Staffing for STA **is** satisfied.

**Note: Currently the STA is the WEC. STA could be a US and WEC used elsewhere if desired.**

\*15. Review Desired Staffing requirement for NLO.

Determine that minimum Desired Staffing for NLO's **is NOT** satisfied.

**Note: Examinee will recommend holding over 4 NLO's and call out 4 NLO's for relief, ensuring that at least 4 of the 8 on-shift are Fire Brigade qualified.**

- Recommend holding over 4 NLO's and call out 4 NLO's for relief, ensuring that at least 4 of the 8 on-shift are Fire Brigade qualified.

**Cue: If examinee does not include qualifications with call out, prompt by asking for qualification requirements.**

**Note: Recommendation may be given here or at step 19 of JPM.**

\*16. Review Desired Staffing requirement for RP.

Determine that minimum Desired Staffing for RP **is NOT** satisfied.

**Note: Examinee will recommend holding over 1 RP and call out 1 RP for relief.**

- Recommend holding over 1 RP and call out 1 RP for relief.

**Note: Recommendation may be given here or at step 19 of JPM.**

17. Review Desired Staffing requirement for Chemistry.

Determine that minimum Desired Staffing for Chemistry **is** satisfied.

PERFORMANCE CHECKLIST

STANDARDS

SAT   UNSAT   N/A

18. Review Desired Staffing requirement for Emergency Communicator.

Determine that minimum Desired Staffing for Emergency Communicator **is** satisfied.

\*19. Determines that oncoming crew does not meet Desired Staffing requirement.

Recommends action to ensure Desired staffing meets the requirements.

**Note: Recommendations may have been given at steps 12, 13, 15, and/or 16 of JPM.**

- Recommend filling the FS position with the extra US **OR hold over FS call out** a FS for relief. This position is usually Fire Chief qualified and would be so designated for the shift.
- Recommend filling one of the vacant NSO positions with the extra US (This will still require 2 NSO's to be called out, but only one NSO would be held over until a relief arrived) **OR hold over 2 NSO's and call out 2 NSO's** for relief.
- Recommend holding over 4 NLO's and call out 4 NLO's for relief, ensuring that at least 4 of the 8 on-shift are Fire Brigade qualified
- Recommend holding over 1 RP and call out 1 RP for relief.

**CUE: THIS COMPLETES THIS JPM**

**RECORD STOP TIME** \_\_\_\_\_

**COMMENTS:**

## JOB PERFORMANCE MEASURE

### TASK CONDITIONS:

1. The Unit 1 Containment Spray Pump 1A Seal Package is leaking.
2. A Clearance must be prepared to allow repairs to the pump.
3. The Passport System is down

### INITIATING CUES:

The Shift Manager directs you to identify the **Minimum Required** clearance boundaries and generate a clearance using OP-MW-109-101 Att. 14 to allow repair of the Unit 1 Containment Spray Pump 1A Seal Package. Inform the Shift Manager when complete.

**JOB PERFORMANCE MEASURE**

Rev 0, 03/22/06

TASK TITLE: Establish Clearance Boundary for CS Pump

JPM No.: Admin 2

TPO No: 4E.AM-06

K&A No.: 2.2.13

K&A IMP 3.6/3.8

TRAINEE: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

The Trainee: PASSED \_\_\_\_\_ this JPM

TIME STARTED: \_\_\_\_\_

FAILED \_\_\_\_\_

TIME FINISHED: \_\_\_\_\_

EVALUATION METHOD: PERFORM \_\_\_\_\_

SIMULATE \_\_\_\_\_

LOCATION: IN PLANT \_\_\_\_\_

SIMULATOR \_\_\_\_\_

**MATERIALS:**

OP-MW-109-101, Clearance and Tagging (rev 5)

OPS Policy: 500-19, Clearance Order (rev 19)

**GENERAL REFERENCES:**

Containment Spray, P&ID M-46

1A Containment Spray Pump, Electrical Drawing 6E-1-4030 CS01

**TASK STANDARDS:**

Identify the required clearance boundaries to isolate Unit 1 Containment Spray Pump 1A.

**TASK CONDITIONS:**

1. The Unit 1 Containment Spray Pump 1A Seal Package is leaking.
2. A Clearance must be prepared to allow repairs to the pump.
3. The Passport System is down

**INITIATING CUES:**

The Shift Manager directs you to identify the **Minimum Required** clearance boundaries and generate a clearance using OP-MW-109-101 Att. 14 to allow repair of the Unit 1 Containment Spray Pump 1A Seal Package. Inform the Shift Manager when complete.

**CRITICAL ELEMENTS: (\*)**

1, 2 & 3

**Validation Time:** 20 minutes

RECORD START TIME \_\_\_\_\_

**NOTE**

**Provide the examinee with a copy of OP-MW-109-101, if requested ONLY.**

**Provide the examinee with a copy of OPS Policy 500-19, if requested ONLY**

*1.	Obtain Drawings:  Containment Spray M-46, Sh 1A  Containment Spray Pump 1A 6E-1-4030 CS01	Obtains Drawings:  Containment Spray M-46, Sh 1A  Containment Spray Pump 1A 6E-1-4030 CS01	o	o	o
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*2.	Determine the electrical clearance boundaries and sequence to be used to isolate the Pump.	Determines the clearance boundaries to be:  o 1A CS Pump MCB C/S (1HS-CS001) <b>PTL and info tag</b>	o	o	o
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**NOTE: Fuses do not require a tag. If fuses are tagged, the **sequence#** must be before the breaker OR the same **sequence#** as the breaker.**

- 1AP05E-J-FU-15, 1A CS Pump Control Power Fuses **Off OR Removed**
- 1AP05E-J, 1A CS Pump Breaker **R/O**



PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

\*3. Determine the mechanical clearance boundaries and sequence to be used to isolate the Pump.

Determines the clearance boundaries to be:

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- 1A CS Pump Discharge Valve 1CS004A  
**CLOSED**
- 1A CS Pump Suction Valve 1CS002A  
**CLOSED**
- 1A CS Pump Vent Valve 1CS049A  
**Info Tag**
- 1A CS Pump Drain Valve 1CS016A  
**Info Tag**

4. Inform the Shift Manager of task completion.

Informs the Shift Manager that the clearance boundaries have been identified.

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**Cue: THIS COMPLETES THIS JPM.**

**RECORD STOP TIME** \_\_\_\_\_

**COMMENTS:**

## JOB PERFORMANCE MEASURE

### TASK CONDITIONS:

1. Your crew has been assigned to perform a valve alignment verification in the 2A RHR Hx Room.
2. Radiation Protection has provided a recent Radiological Survey Map for the area.

### INITIATING CUES:

Using the Radiological Survey Map provided, determine the following:

- Highest On Contact dose rate
- Highest Dose Rate at 30 cm
- Highest General Area radiation level
- Highest Contaminated Area in DPM/100cm<sup>2</sup>
- Low Dose Waiting Area
- Minimum required Posting for entry into the HX Room.
- Location of Protective Clothing (PC) requirements to enter the HX Room.

**JOB PERFORMANCE MEASURE**

Rev 0, 03/22/06

TASK TITLE: Determine Dose Rates and Contaminated Areas

JPM No.: Admin 3

TPO No: 4E.AM-04

K&A No.: 2.3.10

K&A IMP 2.9/3.3

TRAINEE: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

The Trainee: PASSED \_\_\_\_\_ this JPM

TIME STARTED: \_\_\_\_\_

FAILED \_\_\_\_\_

TIME FINISHED: \_\_\_\_\_

EVALUATION METHOD: PERFORM \_\_\_\_\_

SIMULATE \_\_\_\_\_

LOCATION: IN PLANT \_\_\_\_\_

SIMULATOR \_\_\_\_\_

**MATERIALS:**

1. AB-357 2A RHR HX Room Survey Map

**GENERAL REFERENCES:**

- AB-357 2A RHR HX Room Survey Map

**TASK STANDARDS:**

Determine Dose Rates and Contaminated Areas using survey map

**TASK CONDITIONS:**

1. Your crew has been assigned to perform a valve alignment verification in the 2A RHR Hx Room.
2. Radiation Protection has provided a recent Radiological Survey Map for the area.

**INITIATING CUES:**

Using the Radiological Survey Map provided, determine the following:

- Highest On Contact dose rate
- Highest Dose Rate at 30 cm
- Highest General Area radiation level
- Highest Contaminated Area in DPM/100cm<sup>2</sup>
- Low Dose Waiting Area
- Minimum required Posting for entry into the HX Room.
- Location of Protective Clothing (PC) requirements to enter the HX Room.

**CRITICAL ELEMENTS: (\*)**

- 2, 3, 4, 5, 6, 7, & 8

**Validation Time:** 10 minutes

**RECORD START TIME \_\_\_\_\_**

**NOTE**

**Provide the examinee with a copy of AB-357 2A RHR HX Room Survey Map.**

1.	Refer to AB-357 2A RHR HX Room Survey Map.	Refers to AB-357 2A RHR HX Room Survey Map.	o	o	o
*2.	Determine the highest 'On Contact' dose rate in mrem/hr.	Determines the highest 'On Contact' dose rate to be <b>36 mrem/hr.</b>	o	o	o
*3.	Determine the highest 'Dose Rate at 30 cm' in mrem/hr.	Determines the highest 'Dose Rate at 30 cm' to be <b>18 mrem/hr.</b>	o	o	o
*4.	Determine the highest 'General Area' radiation level in mrem/hr.	Determines the highest 'General Area' radiation level to be <b>10 mrem/hr.</b>	o	o	o
*5.	Determine the highest 'Contaminated Area' in DPM/100cm <sup>2</sup> .	Determines the highest 'Contaminated Area' to be <b>&lt;1K DPM/100cm<sup>2</sup>.</b>	o	o	o
*6.	Determine Low Dose Waiting Area.	Determines Low Dose Waiting Area is marked by <b>C with a square around it.</b>	o	o	o

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

\*7 Determine Minimum Posting requirements to enter HX Rm.

Determines Minimum Posting to be:

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o

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**Note: Because the area has a controlled entrance with a Step-off Pad, RP may post this room as a Contaminated Area due to plant transient conditions that may occur. The current survey would not require this posting.**

- Radiation Area
- o Contaminated Area

\*8 Determine location of PC requirements to enter HX Rm.

Determines location of PC requirements at the SOP, **AND/OR** on the RWP, **AND/OR** at the RP desk.

**Cue: THIS COMPLETES THIS JPM.**

**RECORD STOP TIME \_\_\_\_\_**

**COMMENTS:**

## **JOB PERFORMANCE MEASURE**

### **TASK CONDITIONS:**

1. You are the Unit 2 Assist NSO.
2. 1BEP-3 is in progress.
3. Unit 2 Unit Supervisor is performing Status Tree monitoring.
4. The Emergency Director (SM) has classified an ALERT.

### **INITIATING CUES:**

1. A NARS form has been filled out and approved. The Emergency Director has directed you to transmit the initial NARS Form per EP-MW-114-100 MWROG OFFSITE NOTIFICATIONS.
2. This is a time critical JPM for NARS notification

**JOB PERFORMANCE MEASURE**

Rev 1, 03/24/2006

TASK TITLE: Perform Offsite Notification (NARS form transmittal) for Alert classification

JPM No.: Admin 4RO

TPO No: IV.F.ZP-14

K&A No.: 2.4.43

K&A IMP. 2.8/3.5

TRAINEE: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

The Trainee: PASSED \_\_\_\_\_ this JPM

TIME STARTED: \_\_\_\_\_

FAILED \_\_\_\_\_

TIME FINISHED: \_\_\_\_\_

EVALUATION METHOD: PERFORM \_\_\_\_\_

SIMULATE \_\_\_\_\_

LOCATION: IN PLANT \_\_\_\_\_

SIMULATOR \_\_\_\_\_

**MATERIALS:**

1. EP-MW-114-100, MWROG OFFSITE NOTIFICATIONS (rev. 5)
2. Completed and approved NARS Form ready for transmittal

**GENERAL REFERENCES:**

- EP-MW-114-100, MWROG OFFSITE NOTIFICATIONS (rev. 5)
- EP-MW-114-100-F-01, NARS Form (rev. B)

**TASK STANDARDS:**

Transmit the completed NARS form within 15 minutes of the initiating cue using the NARS notification system

**TASK CONDITIONS:**

1. You are the Unit 2 Assist NSO.
2. 1BEP-3 is in progress.
3. Unit 2 Unit Supervisor is performing Status Tree monitoring.
4. The Emergency Director (SM) has classified an ALERT.

**INITIATING CUES:**

A NARS form has been filled out and approved. The Emergency Director has directed you to transmit the initial NARS form per EP-MW-114-100 MWROG OFFSITE NOTIFICATIONS.

This is a time critical JPM for NARS notification

**CRITICAL ELEMENTS: (\*)**

2, 3, 4, 5 and 6

CRITICAL TIME PORTION: 15 \* minutes

RECORD START TIME \_\_\_\_\_

**NOTE**

**EXAMINER NOTE:** Record a clock time value on NARS form in block 4 “Accident Classified” of approximately 2 minutes prior to handing form to candidate and today’s date.

Provide the examinee a copy of an Emergency Director approved NARS form ready for transmittal (Candidate Copy).

**AND**

Provide the examinee a copy of EP-MW-114-100 rev. 5.

- 1. Initiate the NARS transmittal.
  - Refer to EP-MW-114-100 step 4.2 and EP-MW-114-100-F-01, NARS Form ◦ ◦ ◦
  - Determine that CODE 20 must be used on the NARS phone.

**NOTE**

Have the examinee simulate/describe the use of the NARS phone.

**NOTE**

**ALTERNATE PATH** begins here with the need to complete the notification using commercial telephone line.



PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

\*2. Establish communications with required agencies.

Establish communications as follows:

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**Note: Have the examinee describe which phone to use if not given in the simulator or MCR.**

- Pick up the BLACK NARS phone.

No dial tone

**Cue: There is no dial tone and phone doesn't respond to dialing code.**

- Determine need to use commercial line.

\*3. Perform NARS transmittal using commercial phone line to Illinois EMA

Call on commercial phone line:

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**Cue: (Provide the following response)**

- Dial (217) 782-7860 on commercial line for Illinois EMA

**This is Illinois EMA**

**Note: REAC (NOT Required for time critical notification) is NOT manned 24 –7. They are in the same building as IEMA and IDNS. IEMA notifies IDNS and REAC to activate on off hours. REAC will pickup the phone during normal work hours from the normal NARS phone, but will be notified by IEMA from the call on the commercial line. REAC will notify the station when they are manned.**

- Read standby message inserting "Byron Control Room"
- Read Roll call message inserting "Byron Control Room".
  - Take roll call.

Mark box for Illinois EMA on page 2 of NARS form.

**Note: Messages must include "Byron Control Room"**

**Cue: (provide the following response for roll call)**

**Illinois EMA – will contact REAC, if asked**

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

\*4. Record time and date message was initiated.

Roll call completion time \_\_\_\_\_

- Record the time and date on the NARS Form under "Initial Roll Call Complete" heading on page 2.

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**NOTE**

The critical time of 15 minutes is determined from the classification time to the initial roll call is complete: Roll call completion time \_\_\_\_ minus classification time \_\_\_\_ = \_\_\_\_ \* (LESS than 15 minutes.)

\*5. Verbally transmit the NARS form information.

- Transmit NARS form blocks 1-10 over the commercial telephone line using the procedure directed communication standards.

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\*6. Record block 11 data

In block 11:

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- Mark [A]
- Record candidate's name.
- Record outside phone number.

**Cue: (If asked) outside line # is (815)-234-8811**

**Note: If NOT asked, other acceptable outside phone numbers could include:**

**(815) 406-3806 or 3807  
(815) 406-2202**

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

7. Record the time and date the message was transmitted.

o Record in block 11 current time and date.

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8. Enter block 12 data

o Request name of Illinois EMA representative.

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**Cue: John Smith**

o Record under 'NAME'.

o Record Illinois EMA in 'ORGANIZATION' box.

o List time/date.

9. Perform final roll call.

o Perform final roll call

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**Cue: (provide the following response for roll call):**

o Document roll call on page 2 of NARS form.

**Illinois EMA – REAC will be notified to respond.**

10. Ask if there are any questions and clarify as needed

o Ask if there are any questions and clarify as needed.

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**Cue: No questions on information.**

**Note: When candidate reports completion of NARS transmittal to Emergency Director (SM):**

**Cue: THIS COMPLETES THIS JPM.**

**RECORD STOP TIME \_\_\_\_\_**

**COMMENTS:**

## **JOB PERFORMANCE MEASURE**

### **TASK CONDITIONS:**

1. A LOCA has occurred on Unit 2.
2. An operator has been seriously injured in the 2A Containment Spray Pump Room.
3. A rescue attempt must be made.
4. The estimated dose to an individual attempting a rescue is approximately 50 Rem.
5. You are the Emergency Director. The TSC and OSC have NOT yet been staffed.
6. Joe Smith, age 45, (SS# 111-22-3333) has volunteered. His current annual exposure is 100 mrem.

### **INITIATING CUES:**

As the Emergency Director, perform the actions in authorizing this rescue operation in accordance with EP procedures.

## JOB PERFORMANCE MEASURE

Rev 0, 03/22/06

TASK TITLE: Emergency Dose Authorization

JPM No.: Admin 4 SRO

TKO No: 7F.ZP-010-A

K&A No.: 2.4.38

K&A IMP 4.0

TRAINEE: \_\_\_\_\_

DATE: \_\_\_/\_\_\_/\_\_\_

The Trainee: PASSED \_\_\_\_\_ this JPM

TIME STARTED: \_\_\_\_\_

FAILED \_\_\_\_\_

TIME FINISHED: \_\_\_\_\_

EVALUATION METHOD: PERFORM \_\_\_\_\_

SIMULATE \_\_\_\_\_

LOCATION: IN PLANT \_\_\_\_\_

SIMULATOR \_\_\_\_\_

### MATERIALS:

1. EP-AA-113 (Rev 7) Personnel Protective Actions
2. EP-AA-113-F-02 (Rev A) Authorization for Emergency Exposure

### GENERAL REFERENCES:

EP-AA-113 (Rev 7) Personnel Protective Actions

### TASK STANDARDS:

As the Emergency Director, authorize the rescue operation in accordance with EP procedures.

### TASK CONDITIONS:

1. A LOCA has occurred on Unit 2.
2. An operator has been seriously injured in the 2 A Containment Spray Pump Room.
3. A rescue attempt must be made.
4. The estimated dose to an individual attempting a rescue is approximately 50 Rem.
5. You are the Emergency Director. The TSC and OSC have NOT yet been staffed.
6. Joe Smith, age 45, (SS# 111-22-3333) has volunteered. His current annual exposure is 100 mrem.

### INITIATING CUES:

As the Emergency Director, perform the actions in authorizing this rescue operation in accordance with EP procedures.

### CRITICAL ELEMENTS: (\*)

2, 3 & 4

**Validation Time:** 15 minutes

RECORD START TIME \_\_\_\_\_

**NOTE**

**Provide the examinee with a copy of EP-AA-113 and EP-AA-113-F-02, when requested.**

1.	Refer to EP-AA-113.	<ul style="list-style-type: none"> <li>◦ Locate and Open EP-AA-113.</li> </ul>	0	0	0
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*2.	Review dose assessment for rescue.	<p>Determines that:</p> <ul style="list-style-type: none"> <li>◦ Dose is greater than 25 Rem</li> <li>● Requires a volunteer.</li> <li>◦ Requests whether Joe Smith has had a previous emergency exposure.</li> </ul>	0	0	0
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**Cue: (if asked) Joe Smith has NOT had a previous emergency exposure.**

*3.	Authorize proposed radiation exposure in excess of 10CFR20 limits in accordance with listed criteria, and ALARA principles.	<ul style="list-style-type: none"> <li>● Complete EP-AA-113-F-02 for Emergency Exposure</li> </ul>	0	0	0
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**Cue: (if asked) No RP Management is available for review.**

PERFORMANCE CHECKLIST

STANDARDS

SAT

UNSAT

N/A

\*4. Briefs volunteer(s) of possible health effects.

**Cue: Joe Smith has reviewed and signed EP-AA-113-F-02.**

Ensures volunteers have:

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- Signed acknowledgement that they have volunteered

and

- Been briefed on health effects associated with WB doses within a few hours per EP-AA-113, Attachment 1 (2% of population affected)

and

- Approximate cancer risk per EP-AA-113, Attachment 1 (5.3 deaths/1000 people and 15 years are lost)

5. Notify Occupational Health Services.

- o Ensures that Occupational Health Services are promptly notified if EPA-400 dose limits are exceeded.

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6. Ensure documentation of dose when complete.

- o Ensures that dose is recorded and NRC is notified if EPA-400 dose limits are exceeded.

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**Cue: THIS COMPLETES THIS JPM.**

**RECORD STOP TIME \_\_\_\_\_**

**COMMENTS:**