Exelon Nuclear

Job Performance Measure

Perform Offsite AC Power Availability Surveillance (ACB 2424 OOS)

JPM Number: <u>RA 1</u>

Revision Number: <u>11</u>

Date: <u>7/13/2010</u>

Revised By: _____ _____

Instructor   Date

Validated By: _____ _____

SME or Instructor   Date

Reviewed By: _____ _____

Operations Representative   Date

Approved By: _____ _____

Training Department   Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

See File Copy

1. Task description and number, JPM description and number are identified.

2. Knowledge and Abilities (K/A) references are included.

3. Performance location specified. (in-plant, control room, simulator, or other)

4. Initial setup conditions are identified.

5. Initiating cue (and terminating cue if required) are properly identified.

6. Task standards identified and verified by SME review.

7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

8. Verify the procedure(s) referenced by this JPM reflects the current revision:
   Procedure 1BOSR 8.1.1-1   Rev: 009
   Procedure _____ Rev: _____
   Procedure _____ Rev: _____

9. Verify cues both verbal and visual are free of conflict.

10. Verify performance time is accurate

11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____
SME / Instructor   Date

_____
SME / Instructor   Date

_____
SME / Instructor   Date

Revision Record (Summary)

Revision 11

Revised to current format

SIMULATOR SETUP INSTRUCTIONS

1) Reset to IC-21

> NOTE: It is okay to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2) When the above steps are completed for this and other JPMs to be run concurrently then validate, if not previously validated, the concurrently run JPMs using the JPM Validation Checklist

3) This completes the setup for this JPM

INITIAL CONDITIONS

1. You are an extra NSO.

2. Unit 1 is in Mode 1, steady state power.

INITIATING CUE

1. The 1A DG has been declared inoperable and the US has directed you to perform 1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance.

2. The SM has signed and dated the 1BOSR 8.1.1-1 data package cover sheet.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

▪▪▪

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

 * Denotes critical steps

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.
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RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
NOTE **Provide examinee with a copy of 1BOSR 8.1.1-1 to complete**				
1. Circle status of offsite power sources. **Note:** **The bus alive light alone is NOT adequate verification of bus status.**	At 0PM03J, OBSERVE bus alive lights, line amps, and MWs for all 345 KV lines: ◦ Line 0621 ◦ Line 0627 ◦ Line 0624 ◦ Line 0622 ◦ CIRCLE 'energized' for all 345 KV lines	____	____	____
2. Indicate status of disconnects, breakers and SAT links *Cue: ACBs 2412 & 2422 'GREEN' lights are LIT* *Cue: ACB 2414 'GREEN' light is LIT* *Cue: ACB 2424 control switch is in PTL and OOS* *Cue: All disconnects indicate closed* *Cue: Both units SAT x-tie links are REMOVED* *Cue: Both units SAT disconnect links are INSTALLED*	INDICATE: • Open disconnects, breakers and removed SAT links using " O " • Closed disconnects, breakers and installed SAT links using " X "	____	____	____
3. Trace path along dashed lines from any energized offsite power source to the unit ONE SAT banks	TRACE path correctly on data sheet: • Line energized, breakers and disconnects closed	____	____	____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
4. Trace second path from second independent power source to unit <u>TWO</u> SAT bank.	TRACE SECOND path correctly on data sheet: • Line energized, breakers and disconnects closed	___	___	___
*5. Verify independent paths exist from offsite power thru switchyard to both units SAT banks	Verify independent paths • L0621 and L0622 NOT BOTH used • Two paths DO NOT overlap • ENTER 'Yes' for step 5 of data sheet	___	___	___
*6. Check normal and reserve 345 KV buses energized	At 0PM03J, VERIFY bus alive light and voltmeter indications for: • 345 KV bus 6 • 345 KV bus 13 ENTER 'Yes' for steps 6a and 6b on data sheet	___	___	___
*7. Check normal and reserve power SATs available *Cue: SATs 242-1 and 242-2 ENERGIZED*	At 1/2PM01J, VERIFY 'X' and 'Y' winding MW and amps indication for: • SATs 142-1 and 142-2 • SATs 242-1 and 242-2 ENTER 'Yes' for steps 7a and 7b on data sheet	___	___	___
*8. Check ESF buses 141 and 142 energized	At 1PM01J, CHECK bus alive lights, SAT feeder breaker to bus position and bus voltmeter indication for: • Bus 141 • Bus 142 ENTER 'Yes' for steps 8a and 8b on data sheet	___	___	___

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*9. CHECK ESF buses 241 and 242 energized *Cue: BUS 241 BUS ALIVE light is LIT and voltage is normal* *Cue: BUS 242 BUS ALIVE light is LIT and voltage is normal*	At 2PM01J, CHECK bus alive lights, SAT feeder breaker to bus position and bus voltmeter indication for: • Bus 241 • Bus 242 ENTER 'Yes' for steps 9a and 9b on data sheet	___	___	___
NOTE **Alternate path initiated in the following step.**				
*10. Check SAT Feed breakers are closed and connected *Cue: ACB 2412 'GREEN' light LIT* *Cue: ACB 2422 'GREEN' light LIT*	At 1/2PM01J, VERIFY position and control power available: • ACB 1412 • ACB 2412 • ACB 1422 • ACB 2422 ENTER 'Yes' for steps 10a through 10d on data sheet	___	___	___
*11. Check SAT Reserve Feed breakers are closed and connected *Cue: ACB 2414 'GREEN' light LIT* *Cue: ACB 2424 control switch is in PTL and OOS*	At 1/2PM01J, VERIFY position and control power available: • ACB 1414 • ACB 1424 • ACB 2414 • ACB 2424 ENTER 'No' for step 11d and 'Yes' for steps 11a through 11c on data sheet	___	___	___
*12. Determine acceptance criteria are NOT met	• DETERMINE acceptance criteria are NOT MET	___	___	___

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
13. Notify US that acceptance criteria are not met *Cue: US has verified 1BOL 8.1 has been implemented.*	• Notify US verbally or by checking NO and writing in Remarks on cover sheet. _____	_____	_____	_____
Cue: This JPM is completed.				

RECORD STOP TIME: _____

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JPM SUMMARY

Operator's Name: _____ **Job Title**: ☐ EO ☐ RO ☐ SRO ☐ FS
                                                             ☐ STA/IA   ☐ SRO Cert

JPM Title: Perform Offsite AC Power Availability Surveillance (ACB 2424 OOS)

JPM Number: RA 1 (N-75a)   Revision Number: 11

Task Number and Title: 4C.AP-06 Perform the Offsite AC Power Availability Surveillance.

K/A Number and Importance: 2.1.31 4.6

Suggested Testing Environment: Simulator

Alternate Path: ☒ Yes ☐ No   SRO Only: ☐ Yes ☒ No   Time Critical: ☐ Yes ☒ No

Reference(s):

1BOSR 8.1.1-1, Rev 9, Normal and Reserve Offsite AC Power Availability Weekly Surveillance

CRITICAL STEPS (*) 5, 6, 7, 8, 9, 10, 11 & 12

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☐ Other

Testing Method: ☐ Simulate   ☐ Perform

Estimated Time to Complete: 15 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily?   ☐ Yes   ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____

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Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ **Date**: _____

INITIAL CONDITIONS

1. You are an extra NSO.

2. Unit 1 is in Mode 1, steady state power.

INITIATING CUE

1. The 1A DG has been declared inoperable and the US has directed you to perform 1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance.

2. The SM has signed and dated the 1BOSR 8.1.1-1 data package cover sheet.

Exelon Nuclear

Job Performance Measure

Minimum Shift Staffing

JPM Number: <u>SA 1</u>

Revision Number: <u>1</u>

Date: <u>7/20/2010</u>

Revised By: _____   _____
                        Instructor   Date

Validated By: _____   _____
                        SME or Instructor   Date

Reviewed By: _____   _____
                        Operations Representative   Date

Approved By: _____   _____
                        Training Department   Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

See File Copy

1. Task description and number, JPM description and number are identified.

2. Knowledge and Abilities (K/A) references are included.

3. Performance location specified. (in-plant, control room, simulator, or other)

4. Initial setup conditions are identified.

5. Initiating cue (and terminating cue if required) are properly identified.

6. Task standards identified and verified by SME review.

7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

8. Verify the procedure(s) referenced by this JPM reflects the current revision:
   Procedure BAP 320-1, Shift Staffing,   Rev: 19
   Procedure _____   Rev: _____
   Procedure_____   Rev: _____

   | Deleted: during Operation |

9. Verify cues both verbal and visual are free of conflict.

10. Verify performance time is accurate

11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

Revision Record (Summary)

Revision 1

− Put in current JPM Format
− Clarified the intent of the question and limited to asking for recommendations for desired staffing levels.

INITIAL 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)

Name	_Qual_	_Position_	_Name_	_Qual_	_Position_	_Name_	_Qual_	_Position_
Joe		SRO/SM	Sam		NSO	Mary	FB	EO
Bill	FC	SRO	Dave		NSO	Ted		EO
Tom	FC	SRO	Ron	FB	EO	Bob		RP
Andy		SRO	Alan	FB	EO	Terry		Chem
Arnie		SRO/STA	Sally	FB	EO	Karla		Chem
			Tim		EO			

FC: Fire Chief qualified   FB: Fire Brigade qualified

INITIATING CUES:

Determine if the crew meets the <u>desired</u> staffing levels per BAP 320-1, and if not, how many people in any given position would be needed to fill the <u>desired</u> staffing levels.

All Work Hour Rules have been determined to be in compliance.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

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Information For Evaluator's Use:

UNSAT requires written comments on respective step.

   *   Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the

candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
1. Refer to BAP 320-1, Shift Staffing **Cue: Provide a copy of BAP 320-1 after correct procedure has been determined.** **The staffing determination can be determined in any order.**	Determines that BAP 320-1 is needed to make determination.			
2. Review Desired Staffing requirement for Shift Manager.	Determine that minimum Desired Staffing for Shift Manager **is** satisfied.			
3. Review Desired Staffing requirement for Unit Supervisor.	Determine that minimum Desired Staffing for Unit Supervisor **is** satisfied.			
4. Review Desired Staffing requirement for WEC.	Determine that minimum Desired Staffing for WEC **is** satisfied.			
5. Review Desired Staffing requirement for FS/Fire Brigade Chief.	Determine that minimum Desired Staffing for FS **is** satisfied.			
*6. Review Desired Staffing requirement for NSO.	Determine that minimum Desired Staffing for NSO's **is NOT** satisfied. 2 more are desired.			
7. Review Desired Staffing requirement for STA.	Determine that minimum Desired Staffing for STA **is** satisfied.			

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*8. Review Desired Staffing requirement for EO.	Determine that minimum Desired Staffing for EO's **is NOT** satisfied. 2 more are desired.			
*9. Review Desired Staffing requirement for RP.	Determine that minimum Desired Staffing for RP **is NOT** satisfied. 1 more is desired.			
10. Review Desired Staffing requirement for Chemistry.	Determine that minimum Desired Staffing for Chemistry **is** satisfied.			
11. Review Desired Staffing requirement for Emergency Communicator.	Determine that minimum Desired Staffing for Emergency Communicator **is** satisfied – the extra Chemistry person (or any station staff person)			
CUE: The JPM is complete.				

RECORD STOP TIME: _____

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JPM SUMMARY

Operator's Name: _____ **Job Title**:☐ EO ☐ RO ☐SRO ☐ FS
                                                              ☐ STA/IA   ☐ SRO Cert

JPM Title: Minimum Shift Staffing
JPM Number: SA 1   Revision Number: 1
Task Number and Title: S-AM-029 Ensure Minimum Shift Staffing and Authorize Additional
Shift Staffing as Necessary
K/A Number and Importance: 2.1.5   3.9
Suggested Testing Environment: Classroom
Alternate Path: ☐Yes ☒No   SRO Only: ☒Yes ☐No   Time Critical: ☐Yes   ☒No
Reference(s):

     BAP 320-1, Rev 19, Shift Staffing

CRITICAL STEPS (*) 6, 8 & 9

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☐ Other

Testing Method: ☐ Simulate ☐ Perform

Estimated Time to Complete: 20 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily?   ☐Yes   ☐No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐Unsatisfactory

Comments:_____
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_____
_____

Evaluator's Name: _____   (Print)

Evaluator's Signature: _____ **Date**: _____

INITIAL 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)

Name	_Qual_	_Position_	_Name_	_Qual_	_Position_	_Name_	_Qual_	_Position_
Joe		SRO/SM	Sam		NSO	Mary	FB	EO
Bill	FC	SRO	Dave		NSO	Ted		EO
Tom	FC	SRO	Ron	FB	EO	Bob		RP
Andy		SRO	Alan	FB	EO	Terry		Chem
Arnie		SRO/STA	Sally	FB	EO	Karla		Chem
			Tim		EO			

FC: Fire Chief qualified   FB: Fire Brigade qualified

INITIATING CUES:

Determine if the crew meets the <u>desired</u> staffing levels per BAP 320-1, and if not, how many people in any given position would be needed to fill the <u>desired</u> staffing levels.

All Work Hour Rules have been determined to be in compliance.

Exelon Nuclear

Job Performance Measure

Perform Shutdown Margin Calculations

JPM Number: <u>SA 2 / RA 2</u>

Revision Number: <u>0</u>

Date: <u>7/16/2010</u>

Revised By: _____   _____
                                     Instructor   Date

Validated By: _____   _____
                              SME or Instructor   Date

Reviewed By: _____   _____
                       Operations Representative   Date

Approved By: _____   _____
                          Training Department   Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

> **NOTE:** All steps of this checklist should be performed upon initial validation.
> Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

See File Copy

1. Task description and number, JPM description and number are identified.

2. Knowledge and Abilities (K/A) references are included.

3. Performance location specified. (in-plant, control room, simulator, or other)

4. Initial setup conditions are identified.

5. Initiating cue (and terminating cue if required) are properly identified.

6. Task standards identified and verified by SME review.

7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

8. Verify the procedure(s) referenced by this JPM reflects the current revision:
    Procedure 1BOSR 1.1.1-1, Shutdown Margin Surveillance,   Rev: 10
    Procedure BCB-1 Table 1-1a   Rev: 6
    Procedure 1BGP 100-7T1   Rev: 8

9. Verify cues both verbal and visual are free of conflict.

10. Verify performance time is accurate

11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

| Deleted: .1.e-2 |
| Deleted: during Operation |

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

_____   _____
SME / Instructor   Date

Revision Record (Summary)

Revision 0

− JPM modified from Byron 2006 NRC ILT JPM

INITIAL CONDITIONS

1. You are an extra NSO.

2. Unit 1 tripped 5 minutes ago from 100% power. The unit had been at 100% for 2 weeks.

3. Before the trip, Control Bank D was at 220 steps with all rods in proper alignment, bank overlap and sequence.

4. All RCPs are running.

5. All Rod At Bottom lights are lit.

6. Boron concentration is 700 ppm per sample 3 hours ago. No changes to boron concentration have been made.

7. Tave is 557°F, maintained on the steam dumps

8. Reactor average burn-up is 6500 EFPH, MOL.

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INITIATING CUE

1. The plant is to be cooled to 500°F.

2. The Unit Supervisor instructs you to perform 1BOSR 1.1.1-1, Shutdown Margin Surveillance, and determine if Shutdown Margin is met for post-trip conditions, AND for the proposed cooldown.

3. The examiner will provide approval signatures when required.

	Deleted: .1.e
	Deleted: 2
	Deleted: During Operation

This JPM is TIME CRITICAL.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

*   Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
NOTE: Provide the examinee with 1BOSR 1.1.1-1, 1BGP-7T1, and BCB-1, Table 1-1a				
CUE: The reactor tripped at _____. **(NOTE to Evaluator: Fill in the time as 5 minutes before the JPM start time.)**				
1. Refer to 1BOSR 1.1.1-1, Shutdown Margin Surveillance	• OPEN 1BOSR 1.1.1-1 • Go to step F.1	____	____	____
*2. Post Reactor Trip Assessment **Evaluator Note: Sign step F.1.k as the SRO.** **Record time step F.1.k is requested to be signed.** **Time signed: _____:_____** **Critical Time: Is the Start time – Time signed ≤ 55 minutes?** ***YES / NO***	• Circle Yes in the following steps: • F.1.a - h: Yes • F.1.i: record the time 5 minutes ago • F.1.j: record the time 12 hours from the trip time. • F.1.k: Sign that SDM is acceptable	____	____	____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*3 Assess SDM for Cooldown **CUE: The boration has been completed.** **CUE: The next step exhibits time compression: Chemistry reports U-1 RCS is at (+10 PPM above the determined boron concentration).** **Evaluator Note: Sign step F.3.g as the SRO.**	• F.1.l: Continue at step F.3 for cooldown • F.3.a: Record 700 ppm and date and time of 3 hours ago. • F.3.b: Record 500°F • F.3.c: Using BCB-1, Table 1-1a, 500°F and 700 ppm, determine minimum boron concentration to be 838 ppm. • F.3.d: Request or notify the SRO that the RCS must be borated to at least 838 ppm. • F.3.e: Verify minimum boron concentration has been obtained. When cued, record it as (AS CUED) PPM. • F.3.f: Record expiration time as 12 hours after the trip time. • F.3.g: Sign that SDM is acceptable			
CUE: The JPM is complete.				

RECORD STOP TIME: _____

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JPM SUMMARY

Operator's Name: _____ **Job Title:** ☐ EO ☐ RO ☐ SRO ☐ FS
                                                          ☐ STA/IA   ☐ SRO Cert

JPM Title: Perform Shutdown Margin Calculations
JPM Number: SA 2   Revision Number: 0
Task Number and Title: R-AM-012 Apply Technical Specification Requirements
K/A Number and Importance: 2.1.37 4.3/4.6
Suggested Testing Environment: Classroom
Alternate Path: ☐ Yes ☒ No   SRO Only: ☐ Yes ☒ No   Time Critical: ☒ Yes ☐ No
Reference(s):
- 1BOSR 1.1.1-1, Shutdown Margin Surveillance (Rev. 10)
- 1BGP 100-7TI, Reference Reactivity Data Worksheet (Rev.8)
- BCB-1, Byron Unit 1 Cycle 17 Curve Book, Fig 8B, Table 1-1a (Rev. 6)

CRITICAL STEPS (*) 2 & 3

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☐ Other

Testing Method: ☐ Simulate   ☐ Perform

Estimated Time to Complete: 30 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily?   ☐ Yes   ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____
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Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ **Date**: _____

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| Deleted: during Operation |
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| Deleted: 1 |

INITIAL CONDITIONS

1. You are an extra NSO.

2. Unit 1 tripped 5 minutes ago from 100% power. The unit had been at 100% for 2 weeks.

3. Before the trip, Control Bank D was at 220 steps with all rods in proper alignment, bank overlap and sequence.

4. All RCPs are running.

5. All Rod At Bottom lights are lit.

6. Boron concentration is 700 ppm per sample 3 hours ago. No changes to boron concentration have been made.

7. Tave is 557°F, maintained on the steam dumps

8. Reactor average burn-up is 6500 EFPH, MOL.

INITIATING CUE

1. The plant is to be cooled to 500°F.

2. The Unit Supervisor instructs you to perform 1BOSR 1.1.1-1, Shutdown Margin Surveillance and determine if Shutdown Margin is met for post-trip conditions, AND for the proposed cooldown.

3. The examiner will provide approval signatures when required.

This JPM is TIME CRITICAL.

| Deleted: C |
| Deleted: 1400 |
| Deleted: .1.e |
| Deleted: 2 |
| Deleted: During Operation |

Exelon Nuclear

Job Performance Measure

Respond to GDT High Activity

JPM Number: <u>RA 3</u>

Revision Number: <u>1</u>

Date: <u>7/16/2010</u>

Revised By:

Instructor	Date

Validated By:

SME or Instructor	Date

Reviewed By:

Operations Representative	Date

Approved By:

Training Department	Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

See File Copy

1. Task description and number, JPM description and number are identified.

2. Knowledge and Abilities (K/A) references are included.

3. Performance location specified. (in-plant, control room, simulator, or other)

4. Initial setup conditions are identified.

5. Initiating cue (and terminating cue if required) are properly identified.

6. Task standards identified and verified by SME review.

7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

8. Verify the procedure(s) referenced by this JPM reflects the current revision:
   Procedure <u>0BOA RAD-3, Decay Tank High Activity</u> Rev: <u>100</u>
   Procedure _____ Rev:_____
   Procedure _____ Rev: _____

9. Verify cues both verbal and visual are free of conflict.

10. Verify performance time is accurate

11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____
SME / Instructor   Date

_____
SME / Instructor   Date

_____
SME / Instructor   Date

Revision Record (Summary)

Revision 1
Revised to current format

INITIAL CONDITIONS

1. You are an Assist NSO.

2. Both Units are in Mode 1, Steady State Power.

3. Chemistry Department has informed the Control Room that the activity in the 0A gas decay tank (GDT) has been measured at 8.68×10^4 curies.

4. 0A GDT is isolated pending completion of a release package.

INITIATING CUES

The Unit Supervisor directs you to take action to reduce activity level in the 0A GDT per 0BOA RAD-3, DECAY TANK HIGH ACTIVITY, while the Shift Manager evaluates for Emergency Action Levels.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

   * Denotes critical steps

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
1. Refer to 0BOA RAD-3 for direction **Note: Provide copy of BOA RAD-3 and a calculator.**	Locate a copy of 0BOA RAD-3, Decay Tank High Activity.			
2. Suspend radioactive additions to the OA GDT. *Cue: 0A GDT is isolated.* *Cue: (if asked) 0D GDT is in service.*	Suspend radioactive additions to the OA GDT by contacting RWP operator: • Determine status of 0A GDT⫿⫿⫿			
*3. Calculate pressure at which OA GDT activity levels will be acceptable. *CUE: 0A tank pressure is currently 88 psig* *Cue: 0D GDT is now in service.*	⫿⫿⫿⫿ Determines required pressure, per Attachment A of 0BOA RAD-3, to be *$\leq$ 44.33 PSIG. 1) Value calculated: _____			
*4. Transfers 0A GDT contents to reduce pressure to within calculated limit. *CUE: RWP operator notified. Some of 0A GDT contents have been transferred to the 0C GDT. 0A tank pressure now indicates (40 psig).*	Directs RWP operator to transfer 0A GDT to another GDT IAW BOP GW-7 until pressure is less than (calculated value) psig.			
*5. Determine GDT activity is acceptable. *Cue: 0A and 0C GDTs have been sampled and activity in each is:* • *OA GDT is 4 X 10⁴ CURIES* • *OC GDT is 4 X 10⁴ CURIES*	Requests 0A and 0C GDT samples • OA GDT is < 5 X 10^4 CURIES. • OC GDT is < 5 X 10^4 CURIES.			

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
6. Affected GDTs placed in storage. **CUE: RWP panel operator informed and acknowledges direction.**	Directs RWP operator to place OA (and OC) GDTs in storage per BOP GW-6.			
7. Refer to Tech Specs **Cue: The Unit Supervisor will perform Tech Spec evaluation.**	Refers to Tech Specs			
Note: Once candidate determines 'returning to procedure and step in effect' is applicable: **Cue: This JPM is completed.**				

RECORD STOP TIME: _____

• •

JPM SUMMARY

Operator's Name: _____ **Job Title**: ☐ EO   ☐ RO ☐ SRO   ☐ FS
                                                            ☐ STA/IA   ☐ SRO Cert

JPM Title: Respond to GDT High Activity

JPM Number: RA 2   Revision Number: 1

Task Number and Title: R-GW-001 Perform gaseous release

K/A Number and Importance: 2.3.13   3.4

Suggested Testing Environment: Classroom

Alternate Path: ☐ Yes ☒ No   SRO Only: ☐ Yes ☒ No   Time Critical: ☐ Yes ☒ No

Reference(s):

0BOA RAD-3, Decay Tank High Activity, Rev 100

CRITICAL STEPS (*) 3, 4 & 5

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☐ Other

Testing Method: ☐ Simulate   ☐ Perform

Estimated Time to Complete: 10 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily?   ☐ Yes   ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments: _____
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Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ **Date**: _____

INITIAL CONDITIONS

1.   You are an Assist NSO.

2.   Both Units are in Mode 1, Steady State Power.

3.   Chemistry Department has informed the Control Room that the activity in the 0A gas decay tank (GDT) has been measured at 8.68×10^4 curies.

4.   0A GDT is isolated pending completion of a release package.

INITIATING CUES

The Unit Supervisor directs you to take action to reduce activity level in the 0A GDT per 0BOA RAD-3, DECAY TANK HIGH ACTIVITY, while the Shift Manager evaluates for Emergency Action Levels.

Exelon Nuclear

Job Performance Measure

Initiate a LCOAR

JPM Number: <u>SA 3 (S009)</u>

Revision Number: <u>0</u>

Date: <u>8/4/2010</u>

Revised By:

<div align="center">Instructor</div> Date

Validated By:

<div align="center">SME or Instructor</div> Date

Reviewed By:

<div align="center">Operations Representative</div> Date

Approved By:

<div align="center">Training Department</div> Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

See File Copy

1. Task description and number, JPM description and number are identified.

2. Knowledge and Abilities (K/A) references are included.

3. Performance location specified. (in-plant, control room, simulator, or other)

4. Initial setup conditions are identified.

5. Initiating cue (and terminating cue if required) are properly identified.

6. Task standards identified and verified by SME review.

7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

8. Verify the procedure(s) referenced by this JPM reflects the current revision:
   Procedure BAP 1400-6   Rev: 28
   Procedure 1BOL 7.5   Rev: 6

9. Verify cues both verbal and visual are free of conflict.

10. Verify performance time is accurate

11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____
SME / Instructor   Date

_____
SME / Instructor   Date

_____
SME / Instructor   Date

Revision Record (Summary)

Revision 0

– Modified S009 Rev. 6

INITIAL CONDITIONS

1. You are the Unit Supervisor.

2. The unit is at 90% steady state power, all conditions normal.

INITIATING CUE

1. The Shift Manager notifies you 5 minutes ago, the 1B Auxiliary Feedwater Pump was taken out of service for 6 hours for battery terminal cleaning.

2. The Shift Manager directs that it is NOT necessary to update the DEL per LCO 3.0.6 for this short duration LCO.

3. The Clearance Order number is 48763.

4. Initiate the LCOAR.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

- -

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.
- -

RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
NOTE Once the student demonstrates the ability to locate referenced procedure provide the student with a copy of the procedure. Step 1 of this JPM is optional				
1. Refer to BAP 1400-6, Technical Specification Limiting Conditions for Operation Action Requirements (LCOAR)	° LOCATE and OPEN BAP 1400-6	____	____	____
2. Refer to 1BOL 7.5, LCOAR Auxiliary Feedwater System – Tech Spec LCO 3.7.5	° LOCATE and OPEN 1BOL 7.5	____	____	____
*3. Section A of 1 BOL 7.5 ***Cue: Notification occurred 5 minutes ago***	ENTER into Section A: • Time/Date ° By ° Title • Present mode • Initiating event • Condition	____	____	____
*4. Safety function determination ***Cue: There is no other inoperable or degraded support or supported equipment on the A train***	• PERFORM SFD • Indicate No in Section C	____	____	____
5. Update DEL	• Check "N/A" box	____	____	____
6. Fill in Related Clearance Orders	• "48673" from initial conditions	____	____	____
7. Was an IR written?	• Check "No" box and write "planned work" or similar	____	____	____

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ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*8. LCOAR TABLE of 1 BOL 7.5	COMPLETE LCOAR Table: ° CIRCLE Condition A • ENTER notification Time/Date <u>AND</u> sign Condition A	____	____	____
9. Peer check prior to SM signing ***Cue: A second SRO has peer check the package and has signed and dated the margin of the cover sheet***	° BAP 1400-6 for Peer check ° Get an additional SRO to Peer check the BOL package	____	____	____
10. Signed by Shift Manager ***Cue: The shift manager has reviewed the LCOAR***	° NOTIFY SM	____	____	____

RECORD STOP TIME: _____

....

JPM SUMMARY

Operator's Name: _____ **Job Title**:☐ EO ☐ RO ☐SRO ☐ FS
                                                          ☐ STA/IA   ☐ SRO Cert

JPM Title:Initiate a LCOAR. (SRO)

JPM Number: SA 3(S009)   Revision Number: 0

Task Number and Title:8E.TS-007   ENSURE compliance with all applicable Tech Spec Action Statements.

K/A Number and Importance: 2.2.23   4.6

Suggested Testing Environment:Simulator

Alternate Path: ☐Yes ☒No   SRO Only: ☒Yes ☐No   Time Critical: ☐Yes ☒No

Reference(s):
BAP 1400-6, Technical Specification Limiting Conditions for Operation Action Requirements (LCOAR) (Rev 28)
1BOL 7.5, LCOAR Auxiliary Feedwater – Operating Tech Spec LCO 3.7.5 (Rev 6)

CRITICAL STEPS (*) 3, 4 & 8

Actual Testing Environment: ☐ Simulator   ☐ Control Room   ☐ In-Plant   ☐ Other

Testing Method: ☐ Simulate   ☐ Perform

Estimated Time to Complete: 10 minutes   **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:
Were all the Critical Elements performed satisfactorily?   ☐Yes   ☐No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐Satisfactory ☐Unsatisfactory

Comments:_____
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Evaluator's Name: _____   (Print)

Evaluator's Signature: _____ **Date**: _____

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INITIAL CONDITIONS

1.   You are the Unit Supervisor.

2.   The unit is at 90% steady state power, all conditions normal.

INITIATING CUE

1.   The Shift Manager notifies you 5 minutes ago, the 1B Auxiliary Feedwater Pump was taken out of service for 6 hours for battery terminal cleaning.

2.   The Shift Manager directs that it is NOT necessary to update the DEL per LCO 3.0.6 for this short duration LCO.

3.   The Clearance Order number is 48763.

4.   Initiate the LCOAR.

RO Admin JPM 4 withheld from public disclosure.

Exelon Nuclear

Job Performance Measure

Accessing Containment at Power

JPM Number: <u>SA 4</u>

Revision Number: <u>4</u>

Date: <u>7/20/2010</u>

Revised By: _____   _____
                             Instructor   Date

Validated By: _____   _____
                         SME or Instructor   Date

Reviewed By: _____   _____
                      Operations Representative   Date

Approved By: _____   _____
                      Training Department   Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

See File Copy

1. Task description and number, JPM description and number are identified.

2. Knowledge and Abilities (K/A) references are included.

3. Performance location specified. (in-plant, control room, simulator, or other)

4. Initial setup conditions are identified.

5. Initiating cue (and terminating cue if required) are properly identified.

6. Task standards identified and verified by SME review.

7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

8. Verify the procedure(s) referenced by this JPM reflects the current revision:
   Procedure BAP 1450-1, Access to Containment   Rev: 39
   Procedure BAP 1450-T2, Containment Entry Checklist Rev: 35
   Procedure_____Rev: _____

9. Verify cues both verbal and visual are free of conflict.

10. Verify performance time is accurate

11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

_____	_____
SME / Instructor	Date
_____	_____
SME / Instructor	Date
_____	_____
SME / Instructor	Date

Revision Record (Summary)

Revision 4

− Changed to current format

INITIAL CONDITIONS

1. You are the WEC Supervisor.

2. Unit 1 has just failed 1BOSR 4.13.1-1, Reactor Coolant System Water Inventory Balance 72 Hour Surveillance, due to unidentified leakage of 2.2 gpm.

3. Reactor power is 100%, steady state.

INITIATING CUES

1. Two EO's (Jay Eby, Greg Ryan) and one RP Technician (Bob Ward) will be entering Unit 1 Containment to search for an RCS leak outside the missile barrier.

2. Jay Eby, ext 2473, is originating the Containment Entry Checklist, BAP 1450-T2.

3. The access control guard will be Steve Smith, a security guard.

4. They will spend up to 2 hours searching for the leak.

5. RP directs entry through the emergency hatch.

6. Complete the required form for the containment entry through the WEC Supervisor responsibilities.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

■ ■

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

*   * Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.
■ ■

RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
EVALUATORS NOTE: The order of the steps are slightly different in the procedure and checklist.				
EVALUATORS NOTE: The examinee may elect to notify Radiation Protection of the intent to enter containment first in order to expedite the verification of sampling requirements.				
1.　REFER to BAP 1450-1, Access to Containment, and BAP 1450-T2, Containment Entry Checklist **Note:　Provide the examinee with a copies of BAP 1450-1 and 1450-T2**	LOCATE and OPEN: ° 　BAP 1450-1 ° 　BAP 1450-T2			
2.　Check Unit to be entered	On BAP 1450-T2: • 　Check Unit 1			
3.　Complete 'Originator' section of BAP 1450-T2 **Cue:　Two EO's and 1 RPT will enter CNMT.** **Cue:　(From cue sheet) Estimated Duration is two hours**	On BAP 1450-T2, ORIGINATOR section: • 　Originator's name (Jay Eby) • 　Originator's extention (2473) • 　Date of entry • 　Estimated entry duration			
4.　Complete 'Originator' section of BAP 1450-T2 - Reason **Cue:　(from cue sheet) Search for RCS leaks outside the missile barrier**	On BAP 1450-T2: • 　Reason for entry			

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
5. Have Radiation Protection complete their section of BAP 1450-T2 **Cue: Rad Protection has determine air samples are satisfactory.** **Cue: The ALARA brief has been completed and a Rad Tech will accompany the EO's.** **EVALUATOR'S NOTE: SIGN the approval blank AS Rad Protection**	On BAP 1450-T2, RADIATION PROTECTION section: • ATTEND ALARA briefing • GET Rad Prot Tech			
*6. Ensure MCR Turbine and Rx Panel placards are in place **Cue: The "Do Not Change Power" placards are in place**	• Call MCR to PLACE "Do Not Change Power" placards			
7. Ensure NSO has is notified of Access Control Guard's name **Cue: NSO has been told security guard's name.**	• NSO is notified of name of Access Control Guard			
*8. MIDs are tagged out **Cue: The MIDs are parked at the bottom the vessel and are Tagged Out**	• MIDS are deenergized per OP-AA-109-101 and form is checked			
*9. For emergency hatch entry, initiate 1BOL PC-1 **Cue: 1BOL PC-1 is initiated**	• 1BOL PC-1 is required			

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
10. Turn on lights inside missile barrier if entering inside the missile barrier **Cue: (from cue sheet) there will be no entry inside missile barrier**	• No Entry Inside the Missle Barrier (No Lights required)			
*11. Sign WEC Supervisor Approval	• Examinee signs WEC approval			
CUE: The JPM is complete.				

RECORD STOP TIME: _____

....

JPM SUMMARY

Operator's Name: _____ **Job Title**: ☐ EO ☐ RO ☐ SRO ☐ FS
☐ STA/IA ☐ SRO Cert

JPM Title: <u>Accessing Containment At Power</u>

JPM Number: <u>SA 4 (S-12)</u> Revision Number: <u>4</u>

Task Number and Title: <u>S-AM-128 Authorize Containment Entry</u>

K/A Number and Importance: <u>2.3.13   3.8</u>

Suggested Testing Environment: <u>Classroom</u>

Alternate Path: ☐ Yes ☒ No SRO Only: ☒ Yes ☐ No Time Critical: ☐ Yes ☒ No

Reference(s):

   BAP 1450-1, Access to Containment, Rev. 39

   BAP 1450-T2, Containment Entry Checklist, Rev. 35

CRITICAL STEPS (*) 6, 8, 9 & 11

Actual Testing Environment: ☐ Simulator ☐ Control Room ☐ In-Plant ☐ Other

Testing Method: ☐ Simulate ☐ Perform

Estimated Time to Complete: <u>20</u> minutes **Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily? ☐ Yes ☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be: ☐ Satisfactory ☐ Unsatisfactory

Comments:_____

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Evaluator's Name: _____ (Print)

Evaluator's Signature: _____ **Date**: _____

INITIAL CONDITIONS

1. You are the WEC Supervisor.

2. Unit 1 has just failed 1BOSR 4.13.1-1, Reactor Coolant System Water Inventory Balance 72 Hour Surveillance, due to unidentified leakage of 2.2 gpm.

3. Reactor power is 100%, steady state.

INITIATING CUES

1. Two EO's (Jay Eby, Greg Ryan) and one RP Technician (Bob Ward) will be entering Unit 1 Containment to search for an RCS leak outside the missile barrier.

2. Jay Eby, ext 2473, is originating the Containment Entry Checklist, BAP 1450-T2.

3. The access control guard will be Steve Smith, a security guard.

4. They will spend up to 2 hours searching for the leak.

5. RP directs entry through the emergency hatch.

6. Complete the required form for the containment entry through the WEC Supervisor responsibilities.

Exelon Nuclear

Job Performance Measure

Classify Event and Fill Out a NARS Form (Earthquake)

JPM Number: <u>SA 5 (S-19t)</u>

Revision Number: <u>00</u>

Date: <u>10/17/2008</u>

Developed By:	L.Sanders	10/17/2008
	Instructor	Date
Validated By:	Stephen Merrell *(signature on file)*	11/21/2008
	EP Coordinator	Date
Reviewed By:	Steve Godby *(signature on file)*	11/19/2008
	Operations Representative	Date
Approved By:	Robert N Meyer *(signature on file)*	11/24/2008
	Training Department	Date

JOB PERFORMANCE MEASURE VALIDATION CHECKLIST

NOTE: All steps of this checklist should be performed upon initial validation.
Prior to JPM usage, revalidate JPM using steps 8 and 12 below.

See File Copy

1. Task description and number, JPM description and number are identified.

2. Knowledge and Abilities (K/A) references are included.

3. Performance location specified. (in-plant, control room, simulator, or other)

4. Initial setup conditions are identified.

5. Initiating cue (and terminating cue if required) are properly identified.

6. Task standards identified and verified by SME review.

7. Critical steps meet the criteria for critical steps and are identified with an asterisk (*).

8. Verify the procedure(s) referenced by this JPM reflects the current revision:

- EP-MW-114-100 (Rev 9), Midwest Region Offsite Notifications
- EP-MW-114-100-F-01 (Rev. E) Nuclear Accident Reporting System (NARS) Form
- EP-AA-1002 (Rev 26) Exelon Nuclear Radiological Emergency Plan Annex for Byron Station

9. Verify cues both verbal and visual are free of conflict.

10. Verify performance time is accurate

11. If the JPM cannot be performed as written with proper responses, then revise the JPM.

12. When JPM is initially validated, sign and date JPM cover page. Subsequent validations, sign and date below:

See File Copy _____   _____
                  SME / Instructor   Date

Brian Clark _____   10/18/08
                  SME / Instructor   Date

Robert Peterson _____   07/22/2010
                  SME / Instructor   Date

Revision Record (Summary)

Revision 00
– New JPM
– Validated by Clark/Sanders on 10/17/08.

SIMULATOR SETUP INSTRUCTIONS

Applies only if this JPM is to be performed in the simulator.

1. Reset to IC-22

NOTE:	It is okay to use a similar IC to the IC listed above, provided the IC actually used is verified to be compatible with this and other JPMs that are scheduled to be run concurrently.

2. imf pn1067 on

3. When the above steps are completed for this and other JPMs to be run concurrently then validate, if not previously validated, the concurrently run JPMs using the JPM Validation Checklist

4. This completes the setup for this JPM

INITIAL CONDITIONS

1. You are the Shift Emergency Director.
2. The Unit 2 Supervisor has provided you with information related to a Unit 2 event and informed you to perform an Emergency Plan evaluation.

INITIATING CUE

1. Perform an Emergency Plan evaluation and fill out the NARS form for transmittal for the plant conditions provided
2. **This is a time critical JPM**.

PLANT CONDITIONS:

1. Unit 1 is at 100% power. Unit 2 is performing a Tech Spec Shutdown per 3.4.16 Action C.
2. An Earthquake has occurred near the plant.
3. This has resulted in a loss of off-site power for both Units.
4. Annunciator 0-38-E5, "Accelerograph Accel High" is in alarm
5. The National Earthquake Center reports it as a 0.3g seismic event.
6. All of the Emergency Diesel Generators have started and are supplying their respective ESF 4kV buses.
7. Dose Equivalent Iodine 131 activity is 250uci/gm.
8. OBE light is LIT.
9. 1AR020/21 indicate 5 R/hour.
10. No damage to SFP and level is normal.

Fill in the JPM Start Time when the student acknowledges the Initiating Cue.

Information For Evaluator's Use:

UNSAT requires written comments on respective step.

* Denotes critical steps.

Number any comments in the "Comment Number" column on the following pages. Then annotate that comment in the "Comments" section. The comment section should be used to document: the reason that a step is marked as unsatisfactory, marginal performance relating to management expectations, or problems the examinee had while performing the JPM. Comments relating to procedural or equipment issues should be entered and tracked using the site's appropriate tracking system.

Some operations that are performed from outside of the control room may require multiple steps. These items may be listed as individual steps in this JPM. It is acceptable for the candidate to direct the local operator to perform groups of procedure steps instead of calling for each individual item to be performed.

The timeclock starts when the candidate acknowledges the initiating cue.

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RECORD START TIME: _____

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
NOTE The completion of Step 2 fulfills the critical time portion of this JPM. Provide <u>underlined cues</u> if JPM is not performed in the simulator.				
1. Refer to Exelon Nuclear – Radiological Emergency Plan Annex for Byron Station. **Note: This step may be performed at any time**	o Locate and Open, EP-AA-1002 Section 3, Classification of Emergencies	___	___	___
*2. Classify the Event utilizing Section 3, Classification of Emergencies. **Critical portion stop time** _____	• Classify event as ALERT, from HA5 Seismic event > OBE and Confirmed	___	___	___
Time from start to Classification = **_____ minutes**	¢ <u><</u> 15 minutes	___	___	___
3. Obtain NARS form, EP-MW-114-100-F-01, Nuclear Accident Reporting System (NARS). **Note: Step 3 may be performed at any time**	° Obtain NARS form.	___	___	___
NOTE Provide the examinee with a copy of the NARS form.				

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
4. Refer to EP-MW-114-100, MWROG Offsite Notifications, to complete NARS form. **Note: Step 4 may be performed at any time**	° Locate and Open, EP-MW-114-100, MWROG Offsite Notifications, Section 4.1, to complete NARS form.	_____	_____	_____
-NOTE				

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<tr><td colspan="5" align="center"><u>NOTE</u>

Provide the examinee with Wind Speed and Wind Direction cues after examinee has demonstrated the ability to obtain the information from the computer or from the main control board.</td></tr>
</table>

ELEMENT	STANDARD	SAT	UNSAT	Comment Number
*5. Fill out NARS form according to instructions, EP-MW-114-100, Section 4.1, Completing the NARS Form. **Cue: The wind direction on AM004 is 286°.** **Cue: The wind speed on AM001 is 16 meters/sec.** **Cue: An SRO has provided a peer check and signed the "Verified With:" section.**	• Fill out NARS form according to instructions, EP-MW-114-100, Section 4.1 Completing the NARS Form. • BLOCKS 2 thru 9 must be filled correctly to meet the critical portion of filling out the NARS form. (See attached KEY). o Block 10 should be filled in "None" o Verified with another SRO peer check	_____	_____	_____

<table>
<tr><td colspan="5">CUE: The JPM is complete.</td></tr>
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RECORD STOP TIME: _____

JPM SUMMARY

Operator's Name: _____ **Job Title**: ☐ EO ☐ RO ☐ SRO ☐ FS
　　　　　　　　　　　　　　　　　　　　　　　　　　　　☐ STA/IA　　☐ SRO Cert

JPM Title: Classify Event and Fill Out a NARS Form Earthquake

JPM Number: S-19　　　　　　　　　Revision Number: 00

Task Number and Title: 8F.ZP-008 CLASSIFY/RECLASSIFY Emergency Action Levels

K/A Number and Importance: 2.4.41　4.6

Suggested Testing Environment: Simulator

Alternate Path: ☐ Yes ☒ No　　SRO Only: ☒ Yes ☐ No　　Time Critical: ☒ Yes ☐ No

Reference(s):
　　EP-MW-114-100 (Rev 9), Midwest Region Offsite Notifications
　　EP-MW-114-100-F-01 (Rev. E) Nuclear Accident Reporting System (NARS) Form
　　EP-AA-1002 (Rev 26) Exelon Nuclear Radiological Emergency Plan Annex for Byron Station

CRITICAL STEPS (*) 2 & 5

Actual Testing Environment: ☐ Simulator　　☐ Control Room　　☐ In-Plant　　☐ Other

Testing Method:　☐ Simulate　☐ Perform

Estimated Time to Complete: 20 minutes　　**Actual Time Used:** _____ minutes

EVALUATION SUMMARY:

Were all the Critical Elements performed satisfactorily?　　☐ Yes　　　☐ No

The operator's performance was evaluated against standards
contained within this JPM and has been determined to be:　☐ Satisfactory ☐ Unsatisfactory

Comments: _____

_____

_____

_____

_____

_____

_____

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_____

_____

_____

_____

Evaluator's Name: _____　(Print)

Evaluator's Signature: _____　**Date**: _____

Nuclear Accident Reporting System (NARS) Form

UTILITY MESSAGE NO. ___1_____   STATE MESSAGE NO. **N/A**

1. **STATUS**   2. **STATION**
   [A] ACTUAL   [A] BRAIDWOOD   [C] CLINTON   [E] LASALLE   [G] ZION
   [**X**] DRILL/EXERCISE   [**X**] BYRON   [D] DRESDEN   [F] QUAD CITIES

3. **ONSITE CONDITION**   4. **ACCIDENT CLASSIFIED**   **ACCIDENT TERMINATED**
   [A] UNUSUAL EVENT   TIME (3[A-E]): **NOW**   TIME (3[F]): **N/A**
   [**X**] ALERT   DATE (3[A-E]): **TODAY**   DATE (3[F]): **N/A**
   [C] SITE AREA EMERGENCY   EAL#: **HA5**
   [D] GENERAL EMERGENCY
   [E] RECOVERY
   [F] TERMINATED

5. **RELEASE STATUS** 6. **TYPE OF RELEASE**   7. **WIND DIR**   8. **WIND SPEED**
   [**X**] NONE ⟷ [**X**] NOT APPLICABLE   **286**   [A] METERS/SEC.: **16**
   [B] OCCURRING ⟵→ [B] GASEOUS   (DEGREES FROM)   [B] MILES/HR.: **N/A**
   [C] TERMINATED ⟷ [C] LIQUID

9. **RECOMMENDED ACTIONS**
   UTILITY RECOMMENDATION
   [**X**] NONE (UE, Alert and SAE Only)
   -- (GE Only) --
   [B] SHELTER ILLINOIS SUB-AREAS: _____
       AND ADVISE REMAINDER OF THE EPZ TO MONITOR LOCAL RADIO STATIONS
   [C] SHELTER IOWA SUB-AREAS: _____
       AND ADVISE REMAINDER OF THE EPZ TO MONITOR LOCAL RADIO STATIONS
   [D] EVACUATE ILLINOIS SUB-AREAS: _____
       AND ADVISE REMAINDER OF THE EPZ TO MONITOR LOCAL RADIO STATIONS
   [E] EVACUATE IOWA SUB-AREAS: _____
       AND ADVISE REMAINDER OF THE EPZ TO MONITOR LOCAL RADIO STATIONS
   STATE RECOMMENDATION
   [F] NONE
   [G] SHELTER SUB-AREAS: _____
   [H] EVACUATE SUB-AREAS: _____
   [I] RECOMMEND POTASSIUM IODIDE (KI) PER PROCEDURES
   [J] COMMENCE RETURN OF PUBLIC
   [K] OTHER _____

10. **ADDITIONAL INFORMATION** **NONE**

Verified With: **PEER CHECK**   Approved By: **NAME**

11. **TRANSMITTED BY:**   NAME   PHONE NUMBER   TIME/DATE
    [A] EXELON: _____   _____   _____

    [B] STATE: _____   _____   _____

    [C] COUNTY: _____   _____   _____

12. **RECEIVED BY:**   NAME   ORGANIZATION   TIME/DATE

SRRS: 3D.105 (when utilized for operator initial or continuing training)

Braidwood
(UE, Alert, SAE, escalated GE(s),
Termination and Recovery)
NARS Code **20**

Initial   Final
☐   # Illinois EMA   ☐
☐   Illinois REAC   ☐

(Only **if** NARS #1 is a GE)
NARS Code **38**

Initial   Final
☐   # Illinois EMA   ☐
☐   # Grundy Co. Sheriff   ☐
☐   # Kankakee Co. Sheriff   ☐
☐   # Will County Sheriff   ☐
☐   Illinois REAC   ☐
☐   Grundy Co. EMA   ☐
☐   Kankakee Co. EOC   ☐
☐   Will Co. EOC   ☐

ROLL CALL
Initial Roll Call Complete:

_____

(time / date)

Clinton
(UE, Alert, Site Area and escalated
General Emergencies)
NARS Code **98**

Initial   Final
☐   # Illinois EMA   ☐
☐   Illinois REAC   ☐

(Only **if** NARS #1 is a GE)
NARS Code **36**

Initial   Final
☐   # Illinois EMA   ☐
☐   # DeWitt Co. Sheriff   ☐
☐   Illinois REAC   ☐
☐   DeWitt Co. EOC   ☐

LaSalle
(UE, Alert, SAE, escalated GE(s),
Termination and Recovery)
NARS Code **20**

Initial   Final
☐   # Illinois EMA   ☐
☐   Illinois REAC   ☐

(Only **if** NARS #1 is a GE)
NARS Code **25**

Initial   Final
☐   # Illinois EMA   ☐
☐   # Grundy Co. Sheriff   ☐
☐   # LaSalle Co. Sheriff   ☐
☐   Illinois REAC   ☐
☐   Grundy Co. EMA   ☐
☐   LaSalle Co. ESDA

Byron
(UE, Alert, SAE, escalated GE(s),
Termination and Recovery)
NARS Code **20**

Initial   Final
☐   # Illinois EMA   ☐
☐   Illinois REAC   ☐

(Only **if** NARS #1 is a GE)
NARS Code **37**

Initial   Final
☐   # Illinois EMA   ☐
☐   #-1 Ogle Co. Sheriff   ☐
☐   #-1 Rochelle Police   ☐
☐   Illinois REAC   ☐
☐   Ogle Co. ESDA   ☐
☐   Ogle Co. EOC   ☐

Commercial numbers:
IEMA   **217-782-7860**
(QC only)
Iowa EMD   **515-281-3231**

Dresden
(UE, Alert, SAE, escalated GE(s),
Termination and Recovery)
NARS Code **20**

Initial   Final
☐   # Illinois EMA   ☐
☐   Illinois REAC   ☐

(Only **if** NARS #1 is a GE)
NARS Code **22**

Initial   Final
☐   #Illinois EMA   ☐
☐   #Grundy Co. Sheriff   ☐
☐   #Kendall Co. Sheriff   ☐
☐   #Will County Sheriff   ☐
☐   Illinois REAC   ☐
☐   Grundy Co. EMA   ☐
☐   Kendall Co. EOC   ☐
☐   Will Co. EOC   ☐

Quad Cities
(UE, Alert, SAE, escalated GE(s),
Termination and Recovery)
NARS Code **43**

Initial   Final
☐   # Illinois EMA   ☐
☐   # Iowa EMD   ☐
☐   Illinois REAC   ☐
☐   Scott Co. Sheriff   ☐
☐   Clinton Co. EOC   ☐
☐   Scott Co. EOC   ☐

(Only **if** NARS #1 is a GE)
NARS Code **23**

Initial   Final
☐   # Illinois EMA   ☐
☐   # Iowa EMD   ☐
☐   # Clinton Co. EOC   ☐
☐   #Rock Island Co. Sheriff   ☐
☐   # Whiteside Co. Sheriff   ☐
☐   # Scott Co. Sheriff   ☐
☐   # Scott Co. EOC   ☐
☐   Whiteside Co. ESDA   ☐
☐   Rock Island ESDA   ☐
☐   Illinois REAC   ☐

SRRS: 3D.105 (when utilized for operator initial or continuing training)

INITIAL CONDITIONS

1. You are the Shift Emergency Director.

2. The Unit 2 Supervisor has provided you with information related to a Unit 2 event and informed you to perform an Emergency Plan evaluation.

INITIATING CUE

1. Perform an Emergency Plan evaluation and fill out the NARS form for transmittal for the plant conditions provided

2. **This is a time critical JPM**.

PLANT CONDITIONS:

1. Unit 1 is at 100% power. Unit 2 is performing a Tech Spec Shutdown per 3.4.16 Action C.

2. An Earthquake has occurred near the plant.

3. This has resulted in a loss of off-site power for both Units.

4. Annunciator 0-38-E5, "Accelerograph Accel High" is in alarm

5. The National Earthquake Center reports it as a 0.3g seismic event.

6. All of the Emergency Diesel Generators have started and are supplying their respective ESF 4kV buses.

7. Dose Equivalent Iodine 131 activity is 250uci/gm.

8. OBE light is LIT.

9. 1AR020/21 indicate 5 R/hour.

10. No damage to SFP and level is normal.