TASK CONDITIONS:

- 1. You are the Unit 1 Unit Supervisor.
- 2. The Unit is in Mode 3 following a Tech Spec shutdown
- 3. RCS temperature is at 557°F and stable.
- 4. All control rods are inserted.
- 5. Boron concentration is 1092 ppm.
- 6. Reactor average burn-up is 6500 EFPH, MOL (per RRD).
- 7. Unit shutdown was 8 hours ago.
- 8. Decision has been made to go to Mode 4.
- 9. Bounding temperature is 557°F to 320°F
- 10. A shutdown margin calculation is needed for the 9 to 19 hours timeframe since shutdown for the cooldown.

INITIATING CUES:

The Unit 1 Assist NSO has just completed 1BOSR 1.1.1-1, Shutdown Margin Surveillance.

The Shift Manager directs you to perform a review of the Shutdown Margin Surveillance.

	JOB PER	FORMANCE MEASURE	Rev. 0, 8/19/2003
TASK TITLE:	Perform SI	tions JPM No.: A1aSRO (S-979a)	
TPO No: IV.C.G	P-03	K&A No.: 2.1.25	K&A IMP. 3.1
TRAINEE:			DATE://
The Trainee:	PASSED_	this JPM	TIME STARTED:
	FAILED		TIME FINISHED:
EVALUATION M	IETHOD:	PERFORM	SIMULATE
LOCATION:		IN PLANT	SIMULATOR

MATERIALS:

Copy of completed 1BOSR 1.1.1-1 with signed cover sheet U-1 COLR $% \mathcal{A}$

GENERAL REFERENCES:

- 1. 1BOSR 1.1.1-1, Shutdown Margin Surveillance (Rev. 8)
- 2. BCB-1, Table 1-1, Byron Unit 1 Cycle 11A Minimum Required Boron Concentration (ppm) for Shutdown Margin as a Function of Temperature and Burnup (Rev. 22)
- 3. Unit 1 Core Operating Limits Report

TASK STANDARDS:

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

TASK CONDITIONS:

- 1. You are the Unit 1 Unit Supervisor.
- 2. The Unit is in Mode 3 following a Tech Spec shutdown
- 3. RCS temperature is at 557°F and stable.
- 4. All control rods are inserted.
- 5. Boron concentration is 1092 ppm.
- 6. Reactor average burn-up is 6500 EFPH, MOL (per RRD).
- 7. Unit shutdown was 8 hours ago.
- 8. Decision has been made to go to Mode 4.
- 9. Bounding temperature is 557°F to 320°F
- 10. A shutdown margin calculation is needed for the 9 to 19 hours timeframe since shutdown for the cooldown.

INITIATING CUES:

The Unit 1 Assist NSO has just completed 1BOSR 1.1.1-1, Shutdown Margin Surveillance. The Shift Manager directs you to perform a review of the Shutdown Margin Surveillance.

CRITICAL ELEMENTS: (*) 4, and 5

APPROXIMATE COMPLETION TIME: 20 minutes

NOTE							
Supply the trainee with a completed copy of 1BOSR 1.1.1-1.							
JPM task conditions and initiating cues provide the values for core average burn-up (6500), RCS Temp (557), RCS boron concentration (1092 ppm), and all control rods (operable).							
 Refer to completed 1BOSR 1.1.1- 1, Shutdown Margin Surveillance 	Review the information in the completed 1BOSR						
Note: Based on step F.1a and the time since shutdown there is a current SDM, step F.3 is the appropriate step to start the surveillance.	1.1.1-1						
Cue: All prerequisites are met							
2. Present conditions	Review present condition information:						
	• Time and date						
	Core average burnup						
	RCS average temperature						
Cue: (If Asked) The last RCS boron sample was 1 hour ago	RCS boron concentration						
	 Total inoperable control rods 						
Note: Required SDM from COLR is 1.3% ∆K/K = 1300 pcm	 Required SDM from COLR 						

 Bounding assumptions Cue: The Shift Manager decided that the bounding core average temperature will be between 557 °F and 320 °F NOTE: The most limiting core temperature will be 320°F 	 Review bounding core average temperature Review most limiting core average temperature Review bounding time and date 		
 *4. Review Minimum Required Boron and Identify incorrect value used in step F.5.a. NOTE: The minimum required Boron value should be '1287 ppm'. The value used in the surveillance was for 557°F. 	 Minimum Required Boron and Identify incorrect value used in step F.5.a. Identify correct value from 1BCB Table 1-1 for 320°F. 		
*5. Determine predicted shutdown margin inadequate for proposed time frame.	• Determine shutdown margin calculation does not meet minimum requirement and rest of surveillance needs to be completed.		
 Notify RO and SM of error Cue: The RO and Shift Manager acknowledge procedure error and need to re-perform surveillance Cue: This JPM is completed 	 Notify RO of error and need to complete surveillance. Notify Shift Manager of surveillance error and shutdown margin is indeterminate at this point for cooldown. 		

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

- 1. You are the Unit Supervisor.
- 2. The unit is at 100% steady state power, all conditions normal.
- 3. No other LCOARs have been initiated in the past 14 days.

INITIATING CUES:

- 1. Results from a Battery Surveillance have determined that 1 cell on DC Battery 111 has a cell voltage of 2.05 and the 111 Battery Charger is charging at 4 amps on Float.
- 2. Initiate the required LCOAR.

JOB PI	ERFORMANCE MEASURE	Rev.0, 8/25/2003
TASK TITLE: Initiat	e a LCOAR. (SRO)	JPM No.: A.1.b SRO
TPO No.: AM-295	K&A No.: 2.1.12	K&A IMP. 4.0
TRAINEE:		DATE:
The Trainee PAS	SEDthis JPM	TIME STARTED:
FAIL	ED	TIME FINISHED:
EVALUATION METHO	DD: PERFORM	SIMULATE:
LOCATION:	IN PLANT	SIMULATOR:

MATERIALS:

1BOL 8.6, LCOAR Battery Parameters – Operating Tech Spec LCO #3.8.6 (Rev. 3)

GENERAL REFERENCES:

- 1. BAP 1400-6, Technical Specification Limiting Conditions for Operation Action Requirements (LCOAR) (Rev. 26)
- 2. 1BOL 8.6, LCOAR Battery Parameters Operating Tech Spec LCO #3.8.6 (Rev. 3)

TASK STANDARDS:

Take the actions necessary to initiate a LCOAR and determine the action for 125 VDC ESF Battery charging at 4 amps with 1 battery cell at 2.05 Volts

TASK CONDITIONS:

- 1. You are the Unit Supervisor.
- 2. The unit is at 100% steady state power, all conditions normal.
- 3. No other LCOARs have been initiated in the past 14 days.

INITIATING CUES:

- 1. Results from a Battery Surveillance have determined that 1 cell on DC Battery 111 has a cell voltage of 2.05 and the 111 Battery Charger is charging at 4 amps on Float.
- 2. Initiate the required LCOAR.

CRITICAL ELEMENTS: (*) 2, 3, 4, 8

APPROXIMATE COMPLETION TIME: 14 minutes

RECORD START TIME

 Refer to BAP 1400-6, Technical Specification Limiting Conditions for Operation Action Requirements (LCOAR) 	0	LOCATE and OPEN BAP 1400-6		
NOTE: Step 1 of this JPM is optiona	l			
 *2. Identify LCO 3.8.6 not satisfied and proper LCOAR is 1BOL 8.6, LCOAR Battery Parameters – Operating Tech Spec LCO #3.8.6 	•	Determine 125 VDC Battery inoperability addressed by LCO 3.8.6 and LCOAR 1BOL 8.6		
NOTE: Copies of LCOARs are located in the main control room on Unit 2 side of center desk or car	1			

<u>NOTE</u>

Provide the candidate with a copy of 1BOL 8.6, LCOAR Battery Parameters – Operating Tech Spec LCO #3.8.6 after completion of step 2 of the JPM.

*3. Refer to Section A of 1 BOL 8.6

be printed from EDMS.

- Cue: Notification occurred 5 minutes ago
- **NOTE:** Closed bullet items are critical parts of this step.
- ENTER into Section A:

Time/Date

By

•

0

0

Title

- Present mode
- Initiating event (words that describe battery cell and charger amps condition)

*4. Safety function determination		
 Cue: There are no other inoperable or degraded support or supported equipment on any B train equipment PERFORM SFD Indicate NO in Section C 		
 5. Request peer check of BOL performance Cue: The other Unit Supervisor has performed a peer check of the BOL package. Cue: The other Unit Supervisor has performed a peer check of the BOL package. 		
 Signed by Shift Manager Cue: The shift manager, Rich Williams, has been notified of ° NOTIFY SM the LCOAR entry. 		
Cue:Log entry made stating that this is an "unplanned entry"°ENTER "unplanned" in LOG		
7. CRs, work requests, and CO		
Cue: A CR is being written against the ° WRITE CR Battery Parameters for DC Battery 111 by an extra NSO, work request number is 03002345.		

*8. Section D of 1BOL 8.6 NOTE: Other admin actions directed in	COMPLETE LCOAR Table page 5:			
BAP 1400-6 but not required by this jpm include:	• Review all Conditions in Condition table.			
• Update inop status board	° CIRCLE Condition A.			
• Unit train board update	° CIRCLE Condition B			
• Log entry	° CIRCLE Condition F.			
	 ENTER notification Time/Date <u>AND</u> sign for each Condition statement entered. (A, B, F on pages 6 & 8) 			
Cue: This JPM is completed	• Determine Immediate action to Declare Battery 111 inoperable and enter LCO 3.8.4 Condition D.			

RECORD STOP TIME _____

COMMENTS:

TASK CONDITIONS:

- 1. You are the WEC SRO.
- 2. Unit 1 is in Mode 3 following a Reactor trip 35 minutes ago coincident with a line fault on Line 0627.

INITIATING CUES:

- 1. ACB1424 has been INOPERABLE for 8 hours.
- 2. 345 KV BT 7-10 is out of service with its associated bus disconnects open.
- 3. Line 0627 is de-energized due to line fault.
- 4. 345 KV BT 4-5 is open from LBB on 345 KV BT 3-4.
- 5. 345 KV BT 3-7 is open from line fault on Line 0627.
- 6. 345 KV BT 3-4 is open, due to local actions in the switchyard.
- 7. 1BOSR 8.1.1-1 has just been handed to you by an RO reporting that the surveillance did NOT pass due to the status of ACB 1424.
- 8. Review 1BOSR 8.1.1-1 for completion and determine any appropriate additional Tech Spec actions for the Shift Manager.

	JOB PE	RFORMAN	ICE MEASU	RE	Rev. 0, 8/13/2003
TASK TITLE:	Review Off Surveilland	fsite AC Po æ.	ity	JPM No.: A2 SRO (S-975b)	
TPO No: IV.C.A	P-06	K&A	No.: 2.2.12		K&A IMP. 3.4
TRAINEE:					DATE://
The Trainee:	PASSED_		this JPM	TIMES	STARTED:
	FAILED _			TIME	FINISHED:
EVALUATION M	IETHOD:	PERFORM	Λ	SIMULATE	
LOCATION:		IN PLANT		SIMULATOR_	

MATERIALS:

- 1. Completed copy of 1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance
- 2. Completed copy of 1BOL 8.1 for ACB 1424 INOPERABILITY

GENERAL REFERENCES:

1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance (Rev. 4)

TASK STANDARDS:

Review the completed Surveillance 1BOSR 3.8.1.1 Rev.4, Normal and Reserve Offsite AC Power Availability Weekly Surveillance and DETERMINE it was not performed correctly and would pass the acceptance criteria if reperformed.

TASK CONDITIONS:

- 1. You are the WEC SRO.
 - 2. Unit 1 is in Mode 3 following a Reactor trip 35 minutes ago coincident with a line fault on Line 0627.

INITIATING CUES:

- 1. ACB1424 has been INOPERABLE for 8 hours.
- 2. 345 KV BT 7-10 is out of service with its associated bus disconnects open.
- 3. Line 0627 is de-energized due to line fault.
- 4. 345 KV BT 4-5 is open from LBB on 345 KV BT 3-4.
- 5. 345 KV BT 3-7 is open from line fault on Line 0627.
- 6. 345 KV BT 3-4 is open, due to local actions in the switchyard.
- 7. 1BOSR 8.1.1-1 has just been handed to you by an RO reporting that the surveillance did NOT pass due to the status of ACB 1424.
- 8. Review 1BOSR 8.1.1-1 for completion and determine any appropriate additional Tech Spec actions for the Shift Manager.

CRITICAL ELEMENTS: (*) 2, 3 APPROXIMATE COMPLETION TIME: 15 minutes

<u>NOTE</u>

Provide Candidate with a copy of completed 1BOSR 8.1.1-1 to be used in completing this JPM with a signed cover sheet and NSO signature and completion time.

RECORD START TIME_____

<u>NOTE</u>

If this JPM is given on the simulator, only the cues <u>underlined</u> are required to be given to the Candidate. If possible, actual indications should be used for all steps.

	Review completed Offsite Sources. (if asked) <u>The surveillance</u> <u>was performed for LCO 3.8.1</u> <u>Condition A, Required Action</u> <u>A.1 once per 8 hour</u> <u>performance which is required</u> <u>in 36 minutes.</u>	0	Review completed 1BOSR 8.1.1-1 Surveillance data sheets.		
e	 Determine surveillance completion error, step 5 improperly performed. IF the candidate decides at this point to stop and return the surveillance to the RO for reperformance, THEN provide the following cue. 	•	Determine Unit 2 Offsite source improperly utilized Line 0622.		
Cue:	<u>The Shift Manager requests</u> <u>determination if the</u> <u>surveillance would pass if</u> properly reperformed.				

*3. Determine Surveillance step 5 is • Determine surveillance met based on availability of Line would pass using 0624 as Offsite source to Unit 2. available Line 0624 through BT 10-11 and Cue: The Shift Manager BT 11-12, except for preacknowledges surveillance existing inoperability on would pass if properly ACB 1424. reperformed and no additional Tech Spec actions are required. 4. Direct RO to reperform surveillance ° Direct RO to reperform

surveillance

Cue: <u>RO acknowledges error and</u> <u>will immediately reperform the</u> <u>surveillance.</u>

due to the intitial performance error

RECORD STOP TIME

on Data Sheet D2.

COMMENTS:

TASK CONDITIONS:

- 1. You are the Unit 1 Supervisor.
- 2. A Liquid Release of 0WX01T is pending.
- 3. 0PR01J is in LCOAR but functioning following maintenance. This release package has been prepared as the Post Maintenance Testing for the 0PR01J.
- 4. The Unit 1 Assist NSO has just placed the release package in your in box stating that it is ready for approval.

INITIATING CUES:

The Shift Manager has directed you to review the release package and perform Section 7 of BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T.

Inform the Shift Manager when the release can be initiated.

JC	DB PERFO	RMANCE MEASURE	Rev. 0, 8/25/2003
TASK TITLE:	Review an	d Approved Liquid Rele	ase JPM No.: A.3 SRO (S-941)
TPO No: VIII.C.I	HP-001	K&A No.: 2.3.6	K&A IMP: 3.1
TRAINEE:			DATE://
The Trainee:	PASSED_	this JPM	TIME STARTED:
	FAILED		TIME FINISHED:
EVALUATION M	IETHOD:	PERFORM	SIMULATE
LOCATION:		IN PLANT	SIMULATOR

MATERIALS:

- 1. Copy of BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T completed up to Section 7.
- 2. Copy of completed 0BOSR 11.a.5-1, Source Check of Liquid Radwaste Effluent Monitor 0PR01J Surveillance

GENERAL REFERENCES:

- 1. BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T.
- 2. 0BOSR 11.a.5-1, Source Check of Liquid Radwaste Effluent Monitor 0PR01J Surveillance.

TASK STANDARDS:

Perform supervisory review and approval of BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T.

TASK CONDITIONS:

- 1. You are the Unit 1 Supervisor.
- 2. A Liquid Release of 0WX01T is pending.
- 3. 0PR01J is in LCOAR but functioning following maintenance. This release package has been prepared as the Post Maintenance Testing for the 0PR01J.
- 4. The Unit 1 Assist NSO has just placed the release package in your in box stating that it is ready for approval.

INITIATING CUES:

The Shift Manager has directed you to review the release package and perform Section 7 of BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T.

Inform the Shift Manager when the release can be initiated.

CRITICAL ELEMENTS: (*) 2

APPROXIMATE COMPLETION TIME: 20 minutes

<u>NOTE</u>

Provide the candidate with the following copies;

- Partially completed BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T completed up to Section 7
- Completed 0BOSR 11.a.5-1, Source Check of Liquid Radwaste Effluent Monitor 0PR01J Surveillance.

RECORD START TIME _____

1.	Refer to partially completed BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T completed up to Section 7.		Review BCP 400-TWX01 Liquid Radwaste Release Form for Release Tank 0WX01T completed up to Section 7 for completion		
*2.	Review Step 6.9.5 and 6.17.10 and Identify wrong HIGH alarm setpoint indicated. te: The correct HIGH alarm is 1.23E-04 micro Curies/ml. The setpoint was incorrectly set at 1.24E-03 micro Curies/ml.	•	Identify from review that Step 6.17.10 does NOT reflect proper HIGH alarm setpoint for 0PR01J. Information from steps 5.4.1. 3. B., 5.8, and 6.9.5 was transposed to step 6.17.10 for the HIGH alarm setpoint for 0PR01J.		
3. Cu Cu	 Refuse to sign for release approval until error has been resolved. e: NSO acknowledges and will correct the release monitor setpoint error. e: This JPM is complete. 	0	Notify NSO of error and direct correction/ re- performance of step 6.17.10.		

RECORD STOP TIME_____

COMMENTS:

TASK CONDITIONS:

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

INITIATING CUES:

- 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:

- Unit 1 is Mode 5
- Unit 2 is at full power.
- During movement of a 5500 pound load past the Spent Fuel Pool, the lifting and restraining devices failed and the object slid into the spent fuel pool. Several spent fuel assemblies were observed to have significant damage and level in the spent fuel pool was decreasing when personnel evacuated the area.
- Both 0RE-AR055 and 0RE-AR056 Fuel Handling Incident Area Radiations monitors are in High Alarm.
- Unit 1 WRGM release channel 1PF430 indicates 1.66 E+06 microCi/sec
- Unit 2 WRGM release channel 2PF430 indicates 1.48 E+06 microCi/sec

Classify Event and Fill Out a NARS Form TASK TITLE: (LOCA)

TPO No: 8F.ZP-008 K&A No.: 2.4.41

TRAINEE:____

The Trainee: PASSED_____ this JPM

FAILED

EVALUATION METHOD: PERFORM_____ SIMULATE_____

LOCATION:

MATERIALS:

- 1. Copy of EP-MW-114-100, Attachment 1
- 2. Key for NARS Form

GENERAL REFERENCES:

- 1 EP-MW-114-100 (Rev 2), MWROG Offsite Notifications (Attachment 1, Nuclear Accident reporting System – NARS)
- 2. EP-AA-1002 (Rev 15) Exelon Nuclear Radiological Emergency Plan Annex for Byron Station (Section 3, Classification of Emergencies)

TASK STANDARDS:

Perform an Emergency Plan evaluation for highest accident classification and associated EAL and fill out NARS form.

TASK CONDITIONS:

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

INITIATING CUES (Also see Plant Conditions, next page):

- 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.

CRITICAL ELEMENTS: (*) 2 & 5

CRITICAL COMPLETION TIMES: 15 minutes and 10 minutes

APPROXIMATE TOTAL COMPLETION TIME: 20 minutes

Rev. 0. 8/21/2032

JPM No.: A4SRO (S-916)

K&A IMP: 4.1

DATE: /__/___

TIME STARTED: _____

TIME FINISHED:

OTHER SIMULATOR

PLANT CONDITIONS:

- Unit 1 is Mode 5
- Unit 2 is at full power.
- During movement of a 5500 pound load past the Spent Fuel Pool, the lifting and restraining devices failed and the object slid into the spent fuel pool. Several spent fuel assemblies were observed to have significant damage and level in the spent fuel pool was decreasing when personnel evacuated the area.
- Both 0RE-AR055 and 0RE-AR056 Fuel Handling Incident Area Radiations monitors are in High Alarm.
- Unit 1 WRGM release channel 1PF430 indicates 1.66 E+06 microCi/sec
- Unit 2 WRGM release channel 2PF430 indicates 1.48 E+06 microCi/sec

RECORD START TIME _____

NOTE

The completion of Step 2, classification, fulfills the first critical time portion of this JPM.

The completion of Step 5, NARS form, fulfills the second critical time portion of this JPM.

 Refer to Exelon Nuclear – Radiological Emergency Plan Annex for Byron Station.
 Locate and Open, EP-AA-1002 Section 3, Classification of Emergencies
 Note: This step may be performed at any time

*2.	Classify the Event utilizing Section 3, Classification of Emergencies.	•	Classify event as SITE AREA EMERGENCY, from RS1 Effluent Monitor		
Cue	(if asked) The reading on 1PR30J = 1.66E+06 microCuries/Sec. and increasing slowly.		value in excess of 3.1E+06 microCuries/Sec. release rate through Aux Building Vent stacks		
Cue	(if asked) The reading on 2PR30J = 1.48E+06 microCuries/Sec. and increasing slowly.		Vent Stacks		
Note	: The time critical portion of this JPM is measured from the time the cues are provided to the time entered in Box 4 of the NARS form, this must be less than or equal to 15 minutes.				
1 st C	ritical portion stop time				
2 nd C	critical portion start time				
	3. Obtain NARS form, page 10 and 11 of EP- MW-114-100, Nuclear Accident Reporting System (NARS).	0	Obtain NARS form.		
Note	: Step 3 may be performed at any time				

NOTE

Provide the examinee with a blank copy of the NARS form.

	any time				
*5.	Fill out NARS form according to instructions, EP-MW-114-100, Attachment 1 Nuclear Accident Reporting System (NARS).	•	Fill out NARS form according to instructions, EP-MW-114-100, Attachment 1 Nuclear		

Cue: (if asked) The wind direction on the PPDS is 190°.

4.

NARS form.

Note: Step 4 may be performed at

Refer to EP-MW-

114-100, MWROG Offsite °

Notifications, to complete

- Cue: (if asked) The wind speed on the PPDS is 13 meters/sec.
- Cue: This completes this JPM
- Note: The time critical portion of this JPM is measured from the time entered in Box 4 of the NARS form to the completion of the NARS form and ready for transmittal, this must be less than or equal to 10 minutes.
- 2nd Critical portion stop time

RECORD STOP TIME_____

COMMENTS:

Locate and Open, EP-MW-114-100, MWROG Offsite Notifications, Section 4.1, to complete NARS form.

- Attachment 1 Nuclear Accident Reporting System (NARS).
- BLOCKS 2 thru 9 must be filled in correctly to meet the critical portion of filling out the NARS form. (See attached KEY).

TASK CONDITIONS:

- 1. You are the Unit 1 Assist NSO.
- 2. Unit 1 is at 99.9% Reactor Power.

INITIATING CUES:

The Unit Supervisor has directed you to reset the AMAG FW flow calibration constants from 1.000 to the Operator Aid 2001-0002SIM values per BOP FW-25 step F.4, on a request from SED. Inform the Unit Supervisor when you are ready for setpoint change verification

-				_	-,	-
TASK TITLE:	Perform P AMAG Fee	•	JPM No.: A	1RO		
TPO No: IV.C.C	X-07	K&A	No.: 2.1.19		K&A IMP: 2	2.9
TRAINEE:					DATE:	_//
The Trainee:	PASSED		this JPM	TIME	STARTED:	
	FAILED _			TIME	FINISHED:	
	/IETHOD:	PERFORM	Л	SIMULATE		
LOCATION:		IN PLANT		SIMULATOR_		
MATERIALS:						

Rev. 0. 8/5/2003

JOB PERFORMANCE MEASURE

- 1. Copy of BOP FW-25
- 2. Operator Aid 2001-0002SIM

GENERAL REFERENCES:

BOP FW-25, Changing Main Feedwater Flow Calibration Constants Operator Aid 2001-0002 SIM, Unit 1 FW Flow Constants

TASK STANDARDS:

Perform BOP FW-25, Changing Main Feedwater Flow Calibration Constants.

TASK CONDITIONS:

- 1. You are the Unit 1 Assist NSO.
- 2. Unit 1 is at 99.9% Reactor Power.

INITIATING CUES:

The Unit Supervisor has directed you to reset the AMAG FW flow calibration constants from 1.000 to the Operator Aid 2001-0002SIM values per BOP FW-25 step F.4, on a request from SED. Inform the Unit Supervisor when you are ready for setpoint change verification

CRITICAL ELEMENTS: (*) 6, 7, 8, 9, 10, 11

APPROXIMATE COMPLETION TIME: 12 minutes

	<u>NOTE</u> Provide the candidate with the following: BOP FW-25, Changing Main Feedwater Flow Calibration Constants									
REC	CORD START TIME									
	Review BOP FW-25. : (If asked) The Shift Manager has approved the performance of this procedure.	0	Review Prerequisites, Precautions, and Limitations and Actions							
2.	Review the Operator Aid for the simulator "Operator Aid 2001-002 SIM.	0	Review information on the operator aid.							
Cue	e:(If asked) The Unit Supervisor has verified that SED wants setpoints changed to the setpoints on Operator Aid 2001- 002 SIM.									
3.	Calculate current average value is 1.000 and effect on calorimetric power is 100% per BOP FW-25 Step F.4.b.1)	0	Calculate the current average feedwater flow constant. Determine current value is 1.00.							
4.	Calculate new average value is 0.9954 effect on calorimetric power is 99.54% per BOP FW-25 Step F.4.b. 2)	0	Calculate the new average feedwater flow constant. Determine new value is 0.9954.							

5.	Determine the approximate change in calorimetric power to 100% -99.54% = +0.46%.	0	Calculate the change in calorimetric power to positive 0.46%.		
*6.	Evaluate the impact on calorimetric to be conservative, indicated reactor power will decrease.	•	Determine the value is a positive number.		
	Determine calorimetric power will decrease and no power reduction will be required.				
*7.	Access Point Details screen on the PPC using attachment A of	٠	Call up the Main Menu on the PPC.		
	BOP FW-25	•	Select option 10, Point Details.		
*8. Change the constant for K8130 using attachment A of BOP FW-	•	Enter desired point K8130.			
	25	٠	Enter new value 0.9954.		
		0	Verify new value accepted.		
*9.	Change the constant for K8131 using attachment A of BOP FW-	٠	Enter desired point K8131.		
	25	٠	Enter new value 0.9954.		
		0	Verify new value accepted.		
*10.	Change the constant for K8132 using attachment A of BOP FW- 25	•	Enter desired point K8132.		
		٠	Enter new value 0.9954.		
		0	Verify new value accepted.		
		Pa	ne 26 of 46		

Page 26 of 46

*11. Change the constant for K8133 using attachment A of BOP FW-25

- Enter desired point K8130.
- Enter new value 0.9954.
- Verify new value accepted.
- 12. Notify Unit Supervisor of completion of changes and ready for setpoint change verification.

Obtain verification of setpoint \Box \Box \Box

Cue: <u>The Unit Supervisor</u> <u>acknowledges ready for</u> <u>setpoint change verification.</u>

Cue: This JPM is complete

RECORD STOP TIME_____

COMMENTS:

TASK CONDITIONS:

- 2. You are an Extra NSO.
- 2. Unit 1 is in Mode 3 following a Reactor trip.

INITIATING CUES:

- 1. The US has directed you to perform 1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance and report when the surveillance is complete.
- 2. ACB1424 has been inoperable for 8 hours and LCOARs 1/2BOL 8.1 have been initiated.
- 3. 345 KV BT 7-10 is out of service with its associated bus disconnects open.
- 4. Line 0627 is de-energized due to line fault.
- 5. 345 KV BT 4-5 is open from LBB on 345 KV BT 3-4
- 6. 345 KV BT 3-7 is open from line fault on Line 0627
- 7. 345 KV BT 3-4 is open, due to local actions in the switchyard
- 8. The US has signed and dated the 1BOSR 8.1.1-1 data package cover sheet.

	JOB PE	RFORMANCE MEASU	RE Rev. 0, 8/13/2003
TASK TITLE:	Perform O Surveilland	ffsite AC Power Availab ce.	ility JPM No.: A2RO (N-75b)
TPO No: IV.C.AP-06		K&A No.: 2.2.12	K&A IMP. 3.0
TRAINEE:			DATE://
The Trainee:	PASSED_	this JPM	TIME STARTED:
	FAILED		TIME FINISHED:
EVALUATION M	IETHOD:	PERFORM	SIMULATE
LOCATION:		IN PLANT	SIMULATOR

MATERIALS:

Copy of 1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance

GENERAL REFERENCES:

1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance (Rev. 4)

TASK STANDARDS:

Correctly perform the steps required to complete the surveillance and determine that Technical Specification compliance is met.

TASK CONDITIONS:

- 1. You are an extra NSO.
- 2. Unit 1 is in Mode 3, following a Reactor Trip.

INITIATING CUES:

- 1. The US has directed you to perform 1BOSR 8.1.1-1, Normal and Reserve Offsite AC Power Availability Weekly Surveillance and report when the surveillance is complete.
- 2. ACB1424 has been inoperable for 8 hours and LCOARs 1/2BOL 8.1 have been initiated.
- 3. 345 KV BT 7-10 is out of service with its associated bus disconnects open.
- 4. Line 0627 is de-energized due to line fault.
- 5. 345 KV BT 4-5 is open from LBB on 345 KV BT 3-4
- 6. 345 KV BT 3-7 is open from line fault on Line 0627
- 7. 345 KV BT 3-4 is open, due to local actions in the switchyard
- 8. The US has signed and dated the 1BOSR 8.1.1-1 data package cover sheet.

CRITICAL ELEMENTS: (*) 2, 3, 4, 5, 6, 7, 8, 9

APPROXIMATE COMPLETION TIME: 15 minutes

<u>NOTE</u>

Provide Candidiate with a copy of 1BOSR 8.1.1-1 to be used in completing this JPM.

RECORD START TIME____

<u>NOTE</u>

If this JPM is given on the simulator, only the cues <u>underlined</u> are required to be given to the Candidate. If possible, actual indications should be used for all steps.

The information for performing this is retreived from 0PM03J, 1PM01J, and 2PM01J. Since the simulator doesn't contain Unit 2 panels and the Candidate will need indications on the status of Unit 2 components, the evaluator will need act as Unit 2 operator providing the information or respond with indications as the operator describes where the indications are located on Unit 2.

Check 345 KV line status At 0PM03J, OBSERVE bus 1. alive lights, line amps, and Note: The bus alive light alone is MWs for all 345 KV lines: NOT adequate verification of bus status. 0 Line 0621 0 Line 0627 Line 0624 0 0 Line 0622 0 CIRCLE 'ENERGIZED' Cue: All 345 KV lines are for Lines 0621, 0622 and ENERGIZED except for Line 0624 0627 0 CIRCLE 'DEENERGIZED' for Line 0627

- *2. Indicate status of disconnects. breakers and SAT links.
- Cue: ACBs 2412 & 2422 'GREEN' lights are LIT.
- Cue: ACBs 2414 & 2424 'GREEN' lights are LIT.
- Cue: All disconnects indicate closed except for 345 KV BT 7- Indicate "O" for the following 10 Bus 7 and Bus 10 disconnects which are open.
- 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"
- items:
- 345 KV BT 7-10 and • associated bus disconnects
- 345 KV BT 3-4
- 345 KV BT 4-5
- 345 KV BT 3-7
- *3. Trace single path along dashed lines from any energized offsite power source to Unit ONE SAT banks.
- Note: Because of the configuration of the switchyard there is only one available path to credit to Unit 1 to allow a second path for Unit 2

TRACE path correctly on data sheet:

• Line energized, breakers and disconnects closed

*4. Trace second path from second independent power source to Unit <u>TWO</u> SAT banks to verify independent paths exist from offsite power through switchyard to both units SAT banks	 TRACE second path correctly on data sheet: L0621 and L0622 NOT BOTH used Two paths DO NOT overlap ENTER 'Yes' for step 5 of data sheet D3 		
 *5. Check normal and reserve 345 KV buses energized Cue: 345 KV bus 6 ENERGIZED 	VERIFY bus alive light and voltmeter indications for: • 345 KV bus 6		
Cue: 345 KV bus 13 ENERGIZED	 345 KV bus 13 		
	ENTER 'Yes' for steps 6a and 6b on data sheet D3		
*6. Check normal and reserve power SATs available	VERIFY 'X' and 'Y' winding MW and amps indication for:		
Cue: SATs 142-1 and 142-2 ENERGIZED	• SATs 142-1 and 142-2		
Cue: SATs 242-1 and 242-2	• SATs 242-1 and 242-2		
ENERGIZED	ENTER 'Yes' for steps 7a and 7b on data sheet D3		
*7. Check ESF buses 141 and 142 energized	CHECK bus alive lights, SAT feeder breaker to bus position and bus voltmeter indication for:		
Cue: ACB 1412 'GREEN' light is LIT, bus 141 ENERGIZED	• Bus 141		
Cue: ACB 1422 'GREEN' light is LIT, bus 142 ENERGIZED	• Bus 142		
JUS 142 ENERGIZED	ENTER 'Yes' for steps 8a and 8b on data sheet D3		

*8. CHECK ESF buses 241 and 242 energized	CHECK bus alive lights, SAT feeder breaker to bus position and bus voltmeter indication for:		
Cue: <u>ACB 2412 'GREEN' light is LIT,</u> bus 241 ENERGIZED	• Bus 241		
Cue: <u>ACB 2422 'GREEN' light is LIT,</u> bus 242 ENERGIZED	• Bus 242		
MUS 242 ENERGIZED	ENTER 'Yes' for steps 9a and 9b on data sheet D3		
 *9. Check ESF crosstie breakers available 	VERIFY position and control power available:		
Cue: ACB 1412 'GREEN' light LIT	• ACB 1412		
Cue: ACB 1414 'GREEN' light LIT	• ACB 1414		
Cue: ACB 2412 'GREEN' light LIT	• ACB 2412		
Cue: ACB 2414 'GREEN' light LIT	• ACB 2414		
Cue: ACB 1422 'GREEN' light LIT	• ACB 1422		
Cue: ACB 1424 'GREEN' light NOT LIT	• ACB 1424		
Cue: ACB 2422 'GREEN' light LIT	• ACB 2422		
Cue: ACB 2424 'GREEN' light LIT	• ACB 2424		
	ENTER 'Yes' for steps 10a through 10e and steps 10g through 10h on data sheet D4		

ENTER NO' for step 10f on data sheet D4

- 10. Report to Unit Supervisor completion of surveillance.
- Inform Unit Supervisor of completion of 1BOSR 8.1.1-1.

0

- Cue: <u>The Unit Supervisor</u> <u>acknowledges completion of</u> <u>1BOSR 8.1.1-1.</u>
- Cue: This JPM is completed

RECORD STOP TIME

COMMENTS:

TASK CONDITIONS:

- 1. You are the Unit 1 Assist NSO.
- 2. A Unit 1 containment release is pending.
- 3. 1PR11J is INOPERABLE

INITIATING CUES:

.

You have been instructed to perform Section 3 of BCP 400-TCNMT/ROUTINE in preparation for this release commencing at step 3.1.1.3.

Rev. 0, 8/20/2003

TASK TITLE:	Change RI Unit 1 Con	JPM No.: A3RO (N-100a)			
TPO No: IV.C.G	W-01	K&A No.: 2.3.9			K&A IMP: 3.9/3.9
TRAINEE:					DATE://
The Trainee:	PASSED_	this	JPM	TIME	STARTED:
	FAILED			TIME	FINISHED:
EVALUATION M	IETHOD:	PERFORM		SIMULATE	
LOCATION:		IN PLANT		SIMULATOR_	

MATERIALS:

- 1. Copy of BCP 400-TCNMT/ROUTINE completed for Unit 1 up to and including Section 2
- 2. Ensure that either the 0A or 0B Aux Building Exhaust Fan is in operation.
- 3. RM11 Supervisory Key

GENERAL REFERENCES:

BCP 400-TCNMT/ROUTINE, Gaseous Effluent Release Form Type: Routine Containment Release (Rev. 11)

TASK STANDARDS:

Take the actions necessary to perform Section 3 of BCP 400-TCNMT/ROUTINE

TASK CONDITIONS:

- 1. You are the Unit 1 Assist NSO.
- 2. A Unit 1 containment release is pending.
- 3. 1PR11J is INOPERABLE

INITIATING CUES:

You have been instructed to perform Section 3 of BCP 400-TCNMT/ROUTINE in preparation for this release commencing at step 3.1.1.3.

CRITICAL ELEMENTS: (*) 6, 7, 10, 11, 12

APPROXIMATE COMPLETION TIME: 15 minutes

RECORD START TIME _____

NOTE - If this JPM is performed on the simulator, only the <u>underlined</u> cue need to be provided to the trainee. To initiate this JPM, hand the partially completed BCP 400-TCNMT/ROUTINE to the trainee. 1. Refer to the partially completed 0 REVIEW BCP 400-BCP 400-TCNMT/ROUTINE TCNMT/ROUTINE for completeness up to Section 3 NOTE Step 2 and 3 of the JPM are provided in case the Candidate wishes to verfive previously completed steps and may be marked N/A if the Candidate initiates the Release Package at step 3.1.1.3 as cued. 2. Instrumentation operability Cue: The daily channel check of 0 VERIFY/COMPLETE the 1RE-PR001 was previously daily channel check on performed and was 1RE-PR001 satisfactory

0 PERFORM the 1PR01J source/channel check 3. Review Check Source test surveillance of 1PR01J 0 Perform Check Source Cue: Another RO had just test of 1PR01J completed the check source 0 **Review Surveillance for** test surveillance 10 minutes completion ago

 Noble gas trend on 1PR11J Cue: 1RE-PR011J is inoperable (provided as intitial condition) 	 VERIFY noble gas trend MARK step N/A 			
5. "As Found" setpoints of 1RE- PR001	 RECORD "As Found" setpoints of 1RE-PR001gas channel: Nigh alarm setpoint Alert alarm setpoint 			
	NOTE			
Provide the candidate with the RM	11 Supervisory Key as the Unit S	Supervis	or	
*6. RM-11 supervisory mode <i>Cue: RM-11 is in the supervisory</i> <i>mode of operation</i>	 PLACE RM-11 in Supervisory Mode 			
*7. Select monitor				
Cue: 1PB101 has been selected	 SELECT 1PB101 by entering 1101 on the keypad and DEPRESS the SEL key 			
	NOTE			
Step 8 and 9 of the JPM may NOT Package and the operator may ma N/A.	be performed as allowed by a N			
8. Select HIGH alarm setpoint				
 channel Cue: The channel item key has been pressed Cue: "9" has been keyed in 	 DEPRESS Channel Item key KEY IN "9" 			
Cue: The select key has been pressed	 DEPRESS the SEL key 			

Candidate Conditions and Cues Sheet

9. H	ligh alarm setpoint verification.								
Cue: Cue:	The HIGH alarm setpoint has been verified. (If asked as Unit Supervisor) The condition has been met no change to setpoint is required.	0	ENTER the HIGH alarm setpoint on 1PB101 per Step 2.5 RECORD the HIGH alarm setpoint value						
	NOTE								
	The Alternate path starts during the 11 in the JPM.	ma	nipulation of the setpoints in	the RM	1-11, Ste	ер			
i	The candidate should inform the SRO of the Rad Monitor problem when the monitor indicates a failure and secure performance of the task. Step 12 in the JPM is the SRO notification.								

Cue: Cue:	Select ALERT alarm channel The channel item key has been pressed <i>"10" has been keyed in</i> The select key has been pressed	•	DEPRESS Channel Item key KEY IN "10" DEPRESS the SEL		
*11. <i>A</i>	Alert alarm setpoint				
Cue:	The ALERT alarm setpoint has been entered	•	ENTER the ALERT alarm setpoint on		
Cue:	Several seconds have passed and the new ALERT alarm		1PB101 per Step 2.5		
	setpoint is displayed	0	RECORD the new ALERT alarm setpoint value		

- *12. Notify the US of the radiation monitor problem.
- Cue: <u>The Unit Supervisor has been</u> <u>notified of the 1PR01J</u> <u>radiation monitor failure.</u>
- Identify the 1PR01J radiation monitor failure and inform the Unit Supervisor.

•

Cue: <u>This JPM is completed</u>

RECORD STOP TIME_____

COMMENTS:

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 0, 5/12/2003

TASK TITLE:		ffsite Notification (NARS	form transmittal)	JPM No.: A4 RO (N-923a)				
TPO No: IV.	F.ZP-14	K&A No.: <u>2.4.43</u>	3	K&A IMP. <u>2.8/3.5</u>				
TRAINEE:				DATE://				
The Trainee:	PASSED	this JPM	TIME	STARTED:				
	FAILED _		TIME	FINISHED:				
EVALUATIO	N METHOD:	PERFORM	SIMULATE					
LOCATION:		IN PLANT	SIMULATOR					
MATERIALS								
1. 2.		00, MWROG OFFSITE d approved NARS Form						
GENERAL R	EFERENCES:							
	EP-MW-114-1	00, MWROG OFFSITE	NOTIFICATIONS (rev. 2)				
TASK STANI	DARDS:							
	Transmit the c NARS notifica		thin 15 minutes of	the initiating cue using the				
TASK COND	ITIONS:							
1. 2. 3. 4.	1BEP-3 is in p Unit 2 Unit Su	nit 2 Assist NSO. rogress. pervisor is performing St cy Director (SM) has clas		ng.				
INITIATING (CUES:							
				Director has directed you to FSITE NOTIFICATIONS.				
This is	s a time critical .	JPM for NARS notificatio	n					
CRITICAL EL	CRITICAL ELEMENTS: (*)							
	2, 3, 4, 5 and	6						
	APPROXIMATE COMPLETION TIME: <u>15</u> minutes CRITICAL TIME PORTION: <u>15 *</u> minutes <u>(5 min from start time of JPM)</u>							

PERFORMANCE CHECKLIST

<u>STANDARDS</u>

RECORD START TIME _____

<u>NOTE</u>

EXAMINER NOTE: Record a clock time value on NARS form in block 4 "Accident Classified" of approximately 10 minutes prior to handing the form to the candidate and today's date.

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

AND

Provide the candidate a copy of EP-MW-114-100 rev. 2.

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

<u>NOTE</u>

Have the candidate simulate/describe the use of the NARS phone unless the JPM is performed on the Simulator, then actual usage is optional.

<u>NOTE</u>

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

PERFORMANCE CHECKLIST	STANDARDS	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>
 *2. Establish communications with required agencies. Note: Have the candidate describe which phone to use if not given in the simulator or MCR. <i>Cue: The NARs phone has an info card attached and is not working.</i> 	Establish communications as follows: • Pick up the BLACK NARS phone. No dial tone • Determine need to use commercial line.			
*3. Perform NARS transmittal using commercial phone line to Illinois EMA	Call on commercial phone line:			
Note: The evaluator is the EMA call recipient, the candidate should describe accessing a commercial phone connection.	 Dial 1 (217) 782-7860 on commercial line for Illinois EMA 			
Cue: (Provide the following response to commercial telephone line call)	 Read standby message inserting "Byron Control Room" Read Roll call message inserting "Byron Control Room". Take roll call. 			
<u>This is Illinois EMA</u>				
Note: IDNS (NOT Required for time critical notification and would be a separate phone call)				
Note: Messages must include "Byron Control Room"	Mark box for Illinois EMA on page 2 of NARS form.			
Cue: (provide the following response for roll call)				
Illinois EMA				

PERFORMANCE CHECKLIST	<u>STANDARDS</u>	<u>SAT</u>	<u>UNSAT</u>	<u>N/A</u>					
 *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.								
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 telphone line using the procedure directed communication standards.								
*6. Record block 11 data	In block 11:								
	Mark [A]								
	• Record candidate's name.								
<i>Cue: (If asked) outside line # is (815)- 234-8811</i>	 Record outside phone number. 								
Note: If NOT asked other acceptable outside phone numbers could include:									
(815) 406-3806 or 3807 (815) 406-2202									

PERFORMANCE CHECKLIST	<u>ST</u>	STANDARDS		<u>UNSAT</u>	<u>N/A</u>
 Record the time and date the message was transmitted. 	o	Record in block 11 current time and date.			
8. Enter block 12 data Cue: John Smith	0 0 0	Request name of Illinois EMA representative. Record under 'NAME'. Record Illinois EMA in 'ORGANIZATION' box. List time/date.			
9. Perform final roll call. <i>Cue: (provide the following response for roll call):</i> <u>Illinois EMA</u>	0	Perform final roll call Document roll call on page 2 of NARS form.			
 10. Ask if there are any questions and clarify as needed Cue: No questions on information. Note: When candidate reports completion of NARS transmittal to Emergency Director (SM): Cue: THIS COMPLETES THIS JPM. 	0	Ask if there are any questions and clarify as needed.			
RECORD STOP TIME					

COMMENTS: