

**FINAL AS-ADMINISTERED ADMINISTRATIVE JPMS**

**FOR THE POINT BEACH INITIAL EXAMINATION - JAN/FEB 2002**

Tag Series Coversheet

Point Beach Nuclear Plant

Clearance Group: 2002-001

Series: 2 FD P-27B-M EM REV0-1

11/01/2001 07:18

Component to be Worked:

2P-27B-M

2T-23 HEATER DRAIN TANK PUMP MOTOR

8/TB2/COL E-20

**Description**

REF: M-2205 SH.1 R28(94); 499B466 SH.292 R10

**Reason**

REPLACEMENT OF TOP MOTOR BEARING

REF: M-2205 SH.1 R29(94); 499B466 SH.292 R12; 499B466 SH.1525 R4

**Hazards**

ISOLATE P-27B PER OI-103

**Completion**

Attribute Description	Attribute Value
Work Week	R10B2
ENERGY Release Paths Available	Yes
OM 3.27 (fire prot / app R)	no
NP 10.1.1 LCO Entry & Tracking	no
Containment Penetration	no
P3 cross reference	0004446

Number	Description
5S	

Status	Description	User	Verification Date
prepared	Prepared By		00/00/0000 00:00
approved	SRO Approval By		00/00/0000 00:00
tag placement in progress	DSS/DOS Authorization		00/00/0000 00:00
tags accepted by work group	Tags Accepted By		00/00/0000 00:00
energy verified released	Energy Release Verification By		00/00/0000 00:00
tag removal authorized	DSS/DOS Removal Authorized By		00/00/0000 00:00
all tags removed	Tags Confirmed Removed		00/00/0000 00:00

POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P119.001COT  
Revision 0 DRAFT  
August 27, 2001

PERFORM CONTROL ROOM SHIFT TURNOVER  
CHECKLIST

A.1.a Ro/sro

K/A REFERENCE: Gen - 2.1.3 (3.0/3.4)  
(NUREG-1122)

ALTERNATE PATH JPM \_\_\_\_\_ YES X NO

PERFORMANCE CHECKLIST:

SATISFACTORY - Properly performed critical step(s) and/or in sequence (if applicable)

UNSATISFACTORY - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.  
Enter identifier here: PBF-2061 "Control Room Shift Turnover Checklist Unit 1"

\_\_\_\_\_ Other document adequately describes necessary task elements.  
Enter identifier here: \_\_\_\_\_

X Task elements described as attached.

DESIRED MODE OF EVALUATION:

APPLICABLE EVALUATION SETTING:

SIMULATE/WALKTHROUGH X DISCUSSION \_\_\_\_\_ PERFORM \_\_\_\_\_ IN-PLANT \_\_\_\_\_ CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 15 MINUTES

PERFORM CONTROL ROOM SHIFT TURNOVER  
CHECKLIST

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EXAMINEE \_\_\_\_\_ EVALUATOR \_\_\_\_\_

START TIME \_\_\_\_\_ FINISH TIME \_\_\_\_\_

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☐ COT ☐ SRO ☐ STA

TOOLS/EQUIPMENT/REFERENCES:

PBF-2061 "Control Room Shift Turnover Checklist Unit 1" Rev 24

TASK STANDARDS:

All 5 control board misalignments identified.

SIMULATOR INFORMATION:

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
Reset simulator to normal 100% power IC for both units (e.g. IC-2). Prior to or after going to run, mis-position the following items:  1) Close SI Pump Discharge Valve, 1SI-866B. 2) Place NaOH Flow Controller, 1SI-836A, in manual. 3) Remove Breaker 1A52-66, G-02 Supply to 1A05, from pullout, leave in Auto (requires key). 4) Change setpoint to 800 psig on PIC-4012, P-38A Discharge Pressure Controller. 5) Place control switch in close for 1RC-430, Pressurizer Power Operated Relief Valve.  A pre-snapped IC may also be used, if available, as long as it meets the above criteria. (Exam IC #61)								

**NOTE:** *If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.*

**NOTE:** *Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.*

PERFORM CONTROL ROOM SHIFT TURNOVER  
CHECKLIST

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**READ AND PROVIDE TO THE EXAMINEE**

\*\*\*\*\*

**THIS SECTION IS READ ONCE FOR THE ENTIRE PACKAGE OF JPMs. IT IS NOT REQUIRED TO REVIEW THIS SECTION FOR EVERY JPM BEING PERFORMED IN THE PACKAGE. THE INITIAL CONDITIONS AND INITIATING CUE(S)/TASKS TO BE PERFORMED SHOULD BE READ AND THEN PROVIDED TO THE EXAMINEE.**

After I read you the initial conditions and initiating cue(s)/task to be performed for this JPM and provide you a copy of the same, you may review and begin. Once you have completed the task, indicate completion by handing back this form to the evaluator unless otherwise told.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

\*\*\*\*\*

**INITIAL CONDITIONS:**

You are the Unit 1 Control Operator.

Unit 1 is at 100% power with no testing or other evolutions in progress.

It is nearing the end of the mid-shift, and you have started to complete the Unit 1 Control Room Shift Turnover Checklist.

The checklist has been completed up to and including page 6.

**INITIATING CUES (IF APPLICABLE):**

You are to continue completion of the Control Room Shift Turnover Checklist for Unit 1 by performing pages 7 through 15.

PERFORM CONTROL ROOM SHIFT TURNOVER  
CHECKLIST

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

START TIME	STEP/SEQUENCE/CRITICAL	SAT
	1 1 Y	UNSAT

---

**ELEMENT:** Identify misalignment of SI Pump Discharge Valve 1SI-866B.

**STANDARD:** 1SI-866B identified as being closed on panel C01, valve should be open.

**CUE:** Any reports by the examinee of the abnormal items to supervision should simply be acknowledged, and the examinee prompted to continue with the checklist. This applies throughout the JPM.

**NOTE:** *Items in Step 1 and Step 3 of this JPM are both a result of the 1SI-866B misalignment. Identification of the misalignment of 1SI-866B by EITHER of the indications will satisfy both steps.*

**COMMENTS:**

---

STEP/SEQUENCE/CRITICAL	SAT
2 1 Y	UNSAT

---

**ELEMENT:** Identify misalignment of NaOH Flow Controller 1SI-836A.

**STANDARD:** 1SI-836A controller identified on panel C01 as being in manual, controller should be in auto.

**CUE:**

**COMMENTS:**

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PERFORM CONTROL ROOM SHIFT TURNOVER  
CHECKLIST

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PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

STEP/SEQUENCE/CRITICAL  
3 1 Y

SAT  
UNSAT

---

**ELEMENT:** Identify that one light is lit on the Unit 1 Safety Injection - Spray Ready status board.

**STANDARD:** Status light indicating that 1SI-866B is not open is identified on status board panel.

**CUE:**

**NOTE:** *Items in Step 1 and Step 3 of this JPM are both a result of the 1SI-866B misalignment. Identification of the misalignment of 1SI-866B by EITHER of the indications will satisfy both steps.*

**COMMENTS:**

---

STEP/SEQUENCE/CRITICAL  
4 1 Y

SAT  
UNSAT

---

**ELEMENT:** Identify misalignment of Emergency Diesel Generator Power Supplies to 1A05.

**STANDARD:** Breakers 1A52-60 and 1A52-66 identified on panel C02 as both being in Auto, which aligns G01 and G02 EDGs to 1A05. Breaker 1A52-66 should be in pullout for a normal alignment.

**CUE:** If examinee inquires about EDG status, examiner should indicate that all diesels are operable and the electrical system should be in a normal alignment.

**COMMENTS:**

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POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P119.001COT  
Revision 0 DRAFT  
August 27, 2001

PERFORM CONTROL ROOM SHIFT TURNOVER  
CHECKLIST

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PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

	STEP/SEQUENCE/CRITICAL	SAT
	5 1 Y	UNSAT
<b>ELEMENT:</b>	Identify misalignment of PIC-4012, P-38A Discharge Pressure Controller.	
<b>STANDARD:</b>	PIC-4012 identified as being set at 800 psig, controller should be at 1200 psig.	
<b>CUE:</b>		
<b>COMMENTS:</b>		

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	STEP/SEQUENCE/CRITICAL	SAT
	6 1 Y	UNSAT
<b>ELEMENT:</b>	Identify misalignment of IRC-430, Pressurizer Power Operated Relief Valve.	
<b>STANDARD:</b>	IRC-430 control switch identified as being in the closed position, it should be in Auto.	
<b>CUE:</b>		
<b>NOTE:</b>	<i>Terminate the JPM when page 15 is completed.</i>	
<b>COMMENTS:</b>		

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TERMINATION CUE: THIS COMPLETES THE JPM.

**COMPLETION TIME:** \_\_\_\_\_



PERFORM A QUADRANT POWER TILT CALCULATION

A.I.B Ro/sro

K/A REFERENCE: Gen - 2.1.25 (2.8/3.1)  
(NUREG-1122)

ALTERNATE PATH JPM \_\_\_\_\_ YES X NO

PERFORMANCE CHECKLIST:

SATISFACTORY - Properly performed critical step(s) and/or in sequence (if applicable)

UNSATISFACTORY - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.  
Enter identifier here: PBF-2512, AOP-6H

\_\_\_\_\_ Other document adequately describes necessary task elements.  
Enter identifier here: \_\_\_\_\_

X Task elements described as attached.

DESIRED MODE OF EVALUATION:

APPLICABLE EVALUATION SETTING:

SIMULATE/WALKTHROUGH X DISCUSSION \_\_\_\_\_ PERFORM X IN-PLANT \_\_\_\_\_ CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 20 MINUTES

POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P015.005aCOT  
Revision 0 DRAFT  
August 27, 2001

PERFORM A QUADRANT POWER TILT CALCULATION

EXAMINEE \_\_\_\_\_ EVALUATOR \_\_\_\_\_

START TIME \_\_\_\_\_ FINISH TIME \_\_\_\_\_

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☐ COT ☐ SRO ☐ STA

TOOLS/EQUIPMENT/REFERENCES:

Improved Technical Specifications (ITS)

PBF-2512 Rev 0.

AOP-6H "Quadrant Power Tilt" Rev 1

Standard Calculator

Attachment 1: PBF-2512 Column 1 completed (required only if JPM is not administered in simulator)

Attachment 2: ROD 14 Calibration Currents (place in ROD book prior to JPM performance or provide to examinee).

Attachment 3: Completed PBF-2512

TASK STANDARDS:

Quadrant power tilt calculation completed and determined to be greater than 1.02 and the required power reduction from Rated Thermal Power is determined to be 24-30%.

NOTE: A completed PBF-2512 (Attachment 3) is included with this JPM based on the initial conditions. Some differences may exist due to reading of the power range current meters. Minor meter reading deviations should not effect proper performance of the critical steps.

SIMULATOR INFORMATION:

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
Initialize to Exam Pack "Dropped Rod (G3)" IC								

**NOTE:** *If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.*

**NOTE:** *Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.*

**PERFORM A QUADRANT POWER TILT CALCULATION**

---

**READ AND PROVIDE TO THE EXAMINEE**

\*\*\*\*\*

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You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

\*\*\*\*\*

**INITIAL CONDITIONS:**

You are the Unit 1 CO.

Unit 1 was at 100% power when a single control rod dropped into the core.

Actions of AOP-6A "Dropped Rod" and AOP-6H "Quadrant Power Tilt" are being performed in parallel.

The plant has been stabilized.

PPCS failed 5 minutes ago due to a hardware problem.

**INITIATING CUES (IF APPLICABLE):**

The DOS has directed you to perform the actions of AOP-6H steps 3 through 6.

PERFORM A QUADRANT POWER TILT CALCULATION

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PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

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START TIME	STEP/SEQUENCE/CRITICAL			SAT
	1	1	N	UNSAT

---

**ELEMENT:** Check reactor power greater than or equal to 95%.

**STANDARD:** Reactor power determined to be less than 95%.

**CUE:** Power is 60% (or as indicated on simulator).

**COMMENTS:**

---

	STEP/SEQUENCE/CRITICAL			SAT
	2	1	N	UNSAT

---

**ELEMENT:** If PPCS tilt alarms are not operable, then check quadrant tilt within 12 hours out of service and every 12 hours thereafter.

**STANDARD:** Manual QPT calculation initiated using PBF-2512.

**CUE:** If inquiry about using spreadsheet QPTCALC.XLS is made, inform examinee that the file is corrupted and a manual calculation will be required using PBF-2512. Provide blank copy of PBF-2512 to examinee if none are available in file drawer.

**COMMENTS:**

---

	STEP/SEQUENCE/CRITICAL			SAT
	3	1	N	UNSAT

---

**ELEMENT:** Obtain NI upper and lower detector current readings.

**STANDARD:** Detector currents obtained from each Power Range NI cabinet drawer. These values are recorded in Column 1 of PBF-2512.

**CUE:** If JPM is not to be administered in simulator, then provide trainee with Attachment 1.

**COMMENTS:**

---

PERFORM A QUADRANT POWER TILT CALCULATION

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

	STEP/SEQUENCE/CRITICAL		SAT
	4	1	UNSAT
		N	
<b>ELEMENT:</b>	Obtain Power Range NI calibration currents.		
<b>STANDARD:</b>	Power Range calibration currents are obtained from ROD 14. These values are recorded on PBF-2512 in Column 2.		
<b>CUE:</b>	If JPM is <u>not</u> to be administered in simulator, then provide trainee with Attachment 2.		
<b>COMMENTS:</b>			

---

	STEP/SEQUENCE/CRITICAL		SAT
	5	2	UNSAT
		N	
<b>ELEMENT:</b>	Complete columns 3, 4, and CALC of PBF-2512.		
<b>STANDARD:</b>	Columns 3, 4, and CALC are completed on PBF-2512 using guidance found at bottom of form.		
<b>CUE:</b>	Following completion of calculations on PBF-2512, the examiner should attempt to re-focus the examinee (as necessary) on the steps required in AOP-6H based on the results of PBF-2512.		
<b>COMMENTS:</b>			

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PERFORM A QUADRANT POWER TILT CALCULATION

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

STEP/SEQUENCE/CRITICAL  
6 3 N

SAT \_\_\_\_\_  
UNSAT \_\_\_\_\_

**ELEMENT:** Check all four power range channels operable.

**STANDARD:** All four power range channels determined to be operable based on available indications.

**CUE:** If inquiry to shift supervision is made regarding power range operability, indicate to examinee that there appears to be no indication of any operability concern with the NIs.

**COMMENTS:**

---

STEP/SEQUENCE/CRITICAL  
7 3 Y

SAT \_\_\_\_\_  
UNSAT \_\_\_\_\_

**ELEMENT:** Determine if QPT is greater than 1.02

**STANDARD:** Examinee determines that QPT is greater than 1.02

**CUE:**

**NOTE:** *QPT is exceeded in channels 42A, 44A, 42B, and 44B.*

**COMMENTS:**

---

STEP/SEQUENCE/CRITICAL  
8 4 Y

SAT \_\_\_\_\_  
UNSAT \_\_\_\_\_

**ELEMENT:** Determine required power reduction from Rated Thermal Power.

**STANDARD:** Examinee determines a power reduction in the range of 24-30% is required from Rated Thermal Power. NO power reduction is required based on current plant conditions.

**CUE:** If necessary, the examinee should be specifically asked the total power reduction required from Rated Thermal Power.

**COMMENTS:**

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TERMINATION CUE: THIS COMPLETES THE JPM.

**COMPLETION TIME:** \_\_\_\_\_

POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P115.035AOT  
Revision 0 DRAFT  
August 27, 2001

REVIEW TAG SERIES FOR ACCURACY

A.2 Ro/SRO

K/A REFERENCE: Gen - 2.2.13 (3.6/3.8)  
(NUREG-1122)

ALTERNATE PATH JPM \_\_\_\_\_ YES X NO

PERFORMANCE CHECKLIST:

SATISFACTORY - Properly performed critical step(s) and/or in sequence (if applicable)

UNSATISFACTORY - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.  
Enter identifier here: NP 1.9.15 "Tagging Procedure"  
OI-103 "Heater Drain Tank Pump Isolation/Restoration"

X Other document adequately describes necessary task elements.  
Enter identifier here: Drawing 499B466 sh 292 or MDB 3.2.2  
Drawing M-2205 sh. 1  
2P27B Heater Drain Tank Pump Tag Series

X Task elements described as attached.

DESIRED MODE OF EVALUATION:

APPLICABLE EVALUATION SETTING:

SIMULATE/WALKTHROUGH X DISCUSSION X PERFORM \_\_\_\_\_ IN-PLANT \_\_\_\_\_ CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 20 MINUTES

POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P115.035AOT  
Revision 0 DRAFT  
August 27, 2001

REVIEW TAG SERIES FOR ACCURACY

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EXAMINEE \_\_\_\_\_ EVALUATOR \_\_\_\_\_

START TIME \_\_\_\_\_ FINISH TIME \_\_\_\_\_

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☐ COT ☐ SRO ☐ STA

TOOLS/EQUIPMENT/REFERENCES:

NP 1.9.15 "Tagging Procedure" Rev 17  
OI-103 "Heater Drain Tank Pump Isolation/Restoration" Rev 5  
2P27B Heater Drain Tank Pump Danger Tag Series (provided)  
Drawing 499B466 sh.292 (or MDB 3.2.2)  
Drawing M-2205 sh. 1

TASK STANDARDS:

Heater Drain Tank Pump Tag Series determined to be inadequate, the two errors are identified, and the "Prepared By" column NOT signed.

SIMULATOR INFORMATION:

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
NONE								

**NOTE:** *If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.*

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REVIEW TAG SERIES FOR ACCURACY

---

**READ AND PROVIDE TO THE EXAMINEE**

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For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

\*\*\*\*\*

**INITIAL CONDITIONS:**

You are a licensed operator assigned to the Work Control Center.  
Unit 2 Heater Drain Tank Pump 2P-27B is to be danger tagged per OI-103 for replacement of the top motor bearing. Maintenance has also requested the pump be hydraulically isolated due to seal leakage concerns when the motor is removed. A tag series was pulled from archives on the previous shift to use as a guide in preparing the new tag series. SOMS is no longer available due to a scheduled database outage.

**INITIATING CUES (IF APPLICABLE):**

The Shift Manager has asked that you review the tag series for adequacy.

If the Tag Series is satisfactory, then sign as the Preparer.

If the Tag Series is not satisfactory, then indicate what changes need to be made to correct all deficiencies.

REVIEW TAG SERIES FOR ACCURACY

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PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

START TIME	STEP/SEQUENCE/CRITICAL			SAT
	1	1	N	UNSAT

---

**ELEMENT:** Obtain and review references as needed to determine tagging series adequacy.

**STANDARD:** As above. References include those on coversheet of the JPM.

**NOTE:** The examiner should keep the examinee focused on the tag series review using available references (i.e. plant walk-down, review of requesting individual documentation, or review of individual tags is not necessary).

The "Restoration Configuration" and "As Left Configuration" columns and sequence are filled out only to provide a more realistic looking tag series. The examiner should keep the examinee focused on the Danger Tag "Placement Configuration" and sequence columns. It is not the intent of the JPM for the "Restoration Configuration" and "As Left Configuration" positions and sequence be reviewed. The identical errors as indicated in steps 2 and 3, are present in these columns only in reverse, and were included solely so as to not make the placement and sequence errors so obvious. The examiner may allow review of these additional columns if desired, but only identification of the Danger Tag placement and sequence errors are considered critical for this JPM.

**CUE:**

**COMMENTS:**

---

	STEP/SEQUENCE/CRITICAL			SAT
	2	1	Y	UNSAT

---

**ELEMENT:** Determine if specified tag series boundaries are adequate for worker safety and scope of work.

**STANDARD:** Examinee identifies that 2P-27B HDT Pump Vent valve 2FD-159 is incorrectly DANGER tagged OPEN. This valve is a normally open vent back to the heater drain tank, and should be shut for isolation.

**CUE:**

**COMMENTS:**

---

REVIEW TAG SERIES FOR ACCURACY

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

	STEP/SEQUENCE/CRITICAL	SAT
	3      1      Y	UNSAT
<b>ELEMENT:</b>	Determine if specified tags are sequenced in the correct order.	
<b>STANDARD:</b>	Examinee determines that sequence is incorrect. Discharge valve 2FD-157, is required to be closed <b>prior</b> to suction valve 2FD-146. The sequence for these two valves (sequence items 4 and 8 on tag series) should be reversed.	
<b>CUE:</b>		
<b>COMMENTS:</b>		

---

	STEP/SEQUENCE/CRITICAL	SAT
	4      2      Y	UNSAT
<b>ELEMENT:</b>	Sign, date, and time the "Prepared By" section on the Tag Series Cover Sheet.	
<b>STANDARD:</b>	Examinee should NOT sign the cover sheet due to the discrepancies identified.	
<b>NOTE:</b>	<i>When examinee has indicated and discussed the identified discrepancies, the JPM can be terminated.</i>	
<b>CUE:</b>		
<b>COMMENTS:</b>		

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**TERMINATION CUE:**    THIS COMPLETES THE JPM.

**COMPLETION TIME:** \_\_\_\_\_

**Tag Series Coversheet**

Point Beach Nuclear Plant

Clearance Group: 2002-001

Series: 2 FD P-27B-M EM REV0-1

11/01/2001 07:18

onment to be Worked:

2P-27B-M

2T-23 HEATER DRAIN TANK PUMP MOTOR

8/TB2/COL E-20

**Description**

REF: M-2205 SH.1 R28(94); 499B466 SH.292 R10

**Reason**

REPLACEMENT OF TOP MOTOR BEARING

REF: M-2205 SH.1 R29(94); 499B466 SH.292 R12; 499B466 SH.1525 R4

**Hazards**

ISOLATE P-27B PER OI-103

**Completion**

Attribute Description	Attribute Value
Work Week	R10B2
ENERGY Release Paths Available	Yes
OM 3.27 (fire prot / app R)	no
NP 10.1.1 LCO Entry & Tracking	no
Containment Penetration	no
P3 cross reference	0004446

Number	Description
SS	

Status	Description	User	Verification Date
prepared	Prepared By		00/00/0000 00:00
approved	SRO Approval By		00/00/0000 00:00
tag placement in progress	DSS/DOS Authorization		00/00/0000 00:00
tags accepted by work group	Tags Accepted By		00/00/0000 00:00
energy verified released	Energy Release Verification By		00/00/0000 00:00
tag removal authorized	DSS/DOS Removal Authorized By		00/00/0000 00:00
all tags removed	Tags Confirmed Removed		00/00/0000 00:00

Tag Series: 2 FD P-27B-M EM REV0-1

Tag Serial No.	Tag Type	Equipment Equipment Description Equipment Location	Pla. Seq.	Placement Configuration	Place. 1st Verif Date/Time	Place. 2nd Verif Date/Time	Rest. Seq.	Restoration Configuration	As Left Configuration	Rest. 1st Verif Date/Time	Rest. 2nd Verif Date/Time	Tag Notes
	Danger	* 2P-27B-CS * P-27B HEATER DRAIN TANK PUMP CONTROL SWITCH * 44/CB/CR 2C-03	1	PULLOUT			16	AUTO	AUTO			
	Danger	* 2A52-33 * PWR TO 2P-27B HEATER DRAIN TANK PUMP * 26/CB/SWGR RM 2A-02	2	RACKED OUT			15	RACKED IN	RACKED IN			
	Danger	* 25-L-28 * PWR TO 2P-27B HDT PUMP MOTOR HEATER * 8/TB2/COL F-18	3	OPEN			14	CLOSED	CLOSED			
	Danger	* 2FD-146 * P-27B HDT PUMP SUCTION * 8/TB2/P-27B	4	SHUT			13	OPEN	OPEN			
	Danger	* 2FD-294B * P-27B HDT PUMP SEAL WATER INLET * 8/TB2/P-27B	5	SHUT			12	OPEN	OPEN			
	Danger	* 2FD-160 * P-27B HDT PUMP SEAL WATER INLET * 8/TB2	6	SHUT			11	OPEN	OPEN			
	Danger	* 2FD-158 * P-27B HDT PUMP DISCHARGE MINI RECIRC TO T-23 HDT * 8/TB2	7	SHUT			10	OPEN	OPEN			
	Danger	* 2FD-157 * P-27B HDT PUMP DISCHARGE * 8/TB2/P-27B	8	SHUT			9	OPEN	OPEN			

Tag Series: 2 FD P-27B-M EM REV0-1

Tag Serial No.	Tag Type	Equipment Equipment Description Equipment Location	Pla. Seq.	Placement Configuration	Place. 1st Verif Date/Time	Place. 2nd Verif Date/Time	Rest. Seq.	Restoration Configuration	As Left Configuration	Rest. 1st Verif Date/Time	Rest. 2nd Verif Date/Time	Tag Notes
	Danger	* 2FD-155 * P-27B HDT PUMP SEAL WATER DRAINER DT-2623 OUTLET * 8/TB2/P-27B	9	SHUT			8	OPEN	OPEN			
	Danger	* 2FD-156 * P-27B HDT PUMP SEAL WATER DRAINER DT-2623 BYPASS * 8/TB2/P-27B	10	SHUT			7	SHUT	SHUT			
	Danger	* 2FD-159 * P-27B HDT PUMP VENT * 8/TB2/P-27B	11	OPEN			6	SHUT	SHUT			
	Danger	* 2FD-157D * P-27B HDT PUMP DISCHARGE CHECK DOWNSTREAM DRAIN * 8/TB2	12	UNCAPPED / OPEN			5	SHUT / CAPPED	SHUT / CAPPED			
	Danger	* 2FD-157B * P-27B HDT PUMP DISCHARGE DRAIN/PI-2567 ROOT ISOL * 8/TB2/P-27B	13	OPEN			4	OPEN	OPEN			
	Danger	* 2FD-157C * P-27B HDT PUMP DISCHARGE DRAIN * 8/TB2/P-27B	14	UNCAPPED / OPEN			3	SHUT / CAPPED	SHUT / CAPPED			
	Danger	* 2FD-146A * P-27B HDT PUMP PX-2610 ISOLATION * 8/TB2/P-27A	15	UNCAPPED / OPEN			2	SHUT / CAPPED	SHUT / CAPPED			
	Danger	* 2FD-146B * P-27B HDT PUMP PX-2609 ISOLATION * 8/TB2/P-27B	16	UNCAPPED / OPEN			1	SHUT / CAPPED	SHUT / CAPPED			

Component	Annotations
2A52-33	*(3) PROTECTIVE DEVICES: 27 DEVICE LOCATED ON CUBICLE 34.

Tag Series Tag I  
Clearance Grou, 2-001  
Tag Series: 2 FD P-27B-M EM REV0-1

11/01 07:18

Component	Annotations
2FD-157B	DESIGN PRESS: 800 PSIG @ 850 DEGF STEM/DISC: CR-13; SEAT: HF
2FD-157D	DESIGN PRESS: 1975 PSIG @ 100 DEGF USASI PRESS STD: 800 PSIG @ 850 DEGF
2P-27B-CS	CR NUMBER N068GREEN, WHITE AND RED INDICATING LIGHTS.

Component	Print Number
2A52-33	499B466 SH 292
2FD-146	BECH 6118 M-2205
2FD-146A	BECH 6118 M-2205
2FD-146B	BECH 6118 M-2205
2FD-155	BECH 6118 M-2205
2FD-156	BECH 6118 M-2205
2FD-157	BECH 6118 M-2205
2FD-157B	BECH 6118 M-2205
2FD-157C	BECH 6118 M-2205
2FD-157D	BECH 6118 M-2205
2FD-158	BECH 6118 M-2205
2FD-159	BECH 6118 M-2205
2FD-160	BECH 6118 M-2205

POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P119.013SRO  
Revision 0 DRAFT  
August 27, 2001

DETERMINE RADIOLOGICAL AREA ENTRY  
REQUIREMENTS

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A.3 RO

K/A REFERENCE: Gen - 2.3.1 (2.6/3.0)  
(NUREG-1122)

ALTERNATE PATH JPM \_\_\_\_\_ YES X NO

**PERFORMANCE CHECKLIST:**

**SATISFACTORY** - Properly performed critical step(s) and/or in sequence (if applicable)

**UNSATISFACTORY** - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.  
Enter identifier here: HP 2.5, HP 2.14

\_\_\_\_\_ Other document adequately describes necessary task elements.  
Enter identifier here: \_\_\_\_\_

X Task elements described as attached.

---

**DESIRED MODE OF EVALUATION:**

**APPLICABLE EVALUATION SETTING:**

SIMULATE/WALKTHROUGH \_\_\_\_\_ DISCUSSION X PERFORM \_\_\_\_\_ IN-PLANT X CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 20 MINUTES



POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P119.013SRO  
Revision 0 DRAFT  
August 27, 2001

DETERMINE RADIOLOGICAL AREA ENTRY  
REQUIREMENTS

---

EXAMINEE \_\_\_\_\_ EVALUATOR \_\_\_\_\_

START TIME \_\_\_\_\_ FINISH TIME \_\_\_\_\_

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☐ COT ☐ SRO ☐ STA

TOOLS/EQUIPMENT/REFERENCES:

HP 2.14 "Containment Keyway Personnel Access" Rev 10  
HP 2.5 "Radiation Work Permit" Rev 26

TASK STANDARDS:

Minimum radiological monitoring requirements determined for entering a Very High Radiation Area.  
Shift Manager verifications determined for entering the Containment Keyway.

SIMULATOR INFORMATION:

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
NONE								

**NOTE:** If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.

**NOTE:** Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.

DETERMINE RADIOLOGICAL AREA ENTRY  
REQUIREMENTS

---

**READ AND PROVIDE TO THE EXAMINEE**

\*\*\*\*\*

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After I read you the initial conditions and initiating cue(s)/task to be performed for this JPM and provide you a copy of the same, you may review and begin. Once you have completed the task, indicate completion by handing back this form to the evaluator unless otherwise told.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

\*\*\*\*\*

**INITIAL CONDITIONS:**

**IC #1:** A Radiation Work Permit is being prepared for entry into a Very High Radiation Area.

**NOTE:** Do **NOT** read the initial conditions listed below until **AFTER** Task #1 is completed. Separate sheets with the individual initial conditions and initiating cues for each task shall be provided to the examinee.

**IC #2:**

A large service water leak inside the Unit 2 containment has forced a plant shutdown. Unit 2 is currently in Mode 5 (Cold Shutdown) to repair the service water leak and several other forced outage work items. Sump 'A' level indication has been erratic since the service water intrusion, and I&C has been troubleshooting the indication. A visual inspection of Sump 'A' from the Seal Table area grating has identified debris in the sump. Access to Sump 'A' is required for removal of the debris. Radiation Protection has initiated a Radiation Work Permit per HP 2.5. The area is posted as a "Very High Radiation Area".

**INITIATING CUES (IF APPLICABLE):**

**Task #1:** You are to determine the minimum personnel radiological monitoring requirements that would be designated on the Radiation Work Permit for entering a Very High Radiation Area.

**NOTE:** Do **NOT** read Task #2 until after the first task is complete.

**Task #2:** You are to determine the Shift Manager (SM) verifications that are required prior to authorizing personnel access to this specific location.

DETERMINE RADIOLOGICAL AREA ENTRY  
REQUIREMENTS

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

	STEP/SEQUENCE/CRITICAL			SAT
	1	1	Y	UNSAT
<b>ELEMENT:</b>	Determine the minimum radiological monitoring requirements for entry into a "Very High Radiation Area".			
<b>STANDARD:</b>	<p>HP 2.5 "Radiation Work Permit" Section 2.6 delineates the minimum requirements for entry. Of the minimum requirements listed, there are three generic radiological monitoring requirements listed for entry into a Very High Radiation Area. These are:</p> <ul style="list-style-type: none"><li>• Step 2.6.2 - Each individual shall have a thermoluminescent dosimeter (TLD).</li><li>• Step 2.6.2 - Each individual shall have a radiation monitoring device which continuously integrates the radiation dose and alarms when a preset dose is received (electronic pocket dosimeter).</li><li>• Step 2.6.3 - Each individual (or group of individuals) shall be monitored by an individual qualified in radiation protection who is equipped with a radiation monitoring device.</li></ul> <p>Identification of all 3 of these items is considered critical.</p>			
<b>CUE:</b>	<p>If examinee begins to reference HPIP 1.65 for neutron dose monitoring requirements, inform examinee that no neutron dose is present (it is not the intent of this JPM to proceed to HPIP 1.65).</p> <p>If examinee inquires about spent fuel movement, inform examinee that this is not a refueling shutdown.</p> <p>When examinee has completed this task, provide the examinee with the second set of specific initial conditions and the second task.</p>			
<b>COMMENTS:</b>				

---

DETERMINE RADIOLOGICAL AREA ENTRY  
REQUIREMENTS

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

START TIME	STEP/SEQUENCE/CRITICAL			SAT
	2	2	N	UNSAT

---

**ELEMENT:** Specific location of area to be entered is determined and appropriate reference obtained (HP 2.14).

**STANDARD:** Location of Sump 'A' determined to be in the Unit 2 Containment Keyway (determination made from Initial Conditions and general plant knowledge). Procedure HP 2.14 determined to be the specific procedure reference that applies to these conditions.

**CUE:**

**COMMENTS:**

---

	STEP/SEQUENCE/CRITICAL			SAT
	3	2	Y	UNSAT

---

**ELEMENT:** Determine the specific Shift Manager verifications for authorizing access to the area described.

**STANDARD:** HP 2.14 "Containment Keyway Personnel Access" identifies four items under Section 4.0 determined to require Shift Manager (SM) verification. **Identification of all 4 items is considered critical.**

- Step 4.2 - Unit is shutdown.
- Step 4.3 - Incore detectors are withdrawn from keyway and a danger tag series initiated to ensure they will not be driven into the keyway while personnel are present.
- Step 4.4 - Transferring fluids to containment drains shall be minimized.
- Step 4.5 - Personnel shall exit the keyway prior to draining the keyway sump (Sump 'A').

**CUE:**

**NOTE:** *Only the identification of the four procedural steps designated to be initialed by the Shift Manager is required and considered critical for this step. The actual status of each item need not be determined, therefore no specific cues for each item are given. Final permission from the Shift Manager is required to be obtained by Radiation Protection (RP) in step 5.2.3, however, this action is initiated by RP and is not considered a "verification" item for authorizing access.*

**COMMENTS:**

---

**TERMINATION CUE:** THIS COMPLETES THE JPM.

**COMPLETION TIME:** \_\_\_\_\_

SUPPLY THE TSC WITH EMERGENCY POWER

A.4 Ro

K/A REFERENCE: Gen - 2.4.29 (2.6/4.0)  
(NUREG-1122)

ALTERNATE PATH JPM \_\_\_\_\_ YES X NO

**PERFORMANCE CHECKLIST:**

**SATISFACTORY** - Properly performed critical step(s) and/or in sequence (if applicable)

**UNSATISFACTORY** - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.  
Enter identifier here: EPIP 4.1

\_\_\_\_\_ Other document adequately describes necessary task elements.  
Enter identifier here: \_\_\_\_\_

X Task elements described as attached.

**DESIRED MODE OF EVALUATION:**

**APPLICABLE EVALUATION SETTING:**

SIMULATE/WALKTHROUGH X DISCUSSION X PERFORM \_\_\_\_\_ IN-PLANT X CONTROL ROOM \_\_\_\_\_

VALIDATED TIME FOR COMPLETION: 12 MINUTES

**SUPPLY THE TSC WITH EMERGENCY POWER**

---

EXAMINEE \_\_\_\_\_ EVALUATOR \_\_\_\_\_

START TIME \_\_\_\_\_ FINISH TIME \_\_\_\_\_

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☐ COT ☐ SRO ☐ STA

**TOOLS/EQUIPMENT/REFERENCES:**

EPIP 4.1 "Technical Support Center (TSC) Activation and Evacuation" Rev 30

**TASK STANDARDS:**

Breakers are re-aligned to supply the TSC with emergency power per EPIP 4.1

**SIMULATOR INFORMATION:**

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
NONE								

**NOTE:** *If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.*

**NOTE:** *Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.*

**SUPPLY THE TSC WITH EMERGENCY POWER**

---

**READ AND PROVIDE TO THE EXAMINEE**

\*\*\*\*\*

**THIS SECTION IS READ ONCE FOR THE ENTIRE PACKAGE OF JPMs. IT IS NOT REQUIRED TO REVIEW THIS SECTION FOR EVERY JPM BEING PERFORMED IN THE PACKAGE. THE INITIAL CONDITIONS AND INITIATING CUE(S)/TASKS TO BE PERFORMED SHOULD BE READ AND THEN PROVIDED TO THE EXAMINEE.**

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EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

\*\*\*\*\*

**INITIAL CONDITIONS:**

You are a licensed operator called in to support the on-shift operations crew.  
A serious plant transient has occurred, resulting in the following conditions:

- 13.8 kV AC buses H01 and H02 are de-energized.
- 4.16 kV and 480 VAC buses 1A05/1B03 and 1A06/1B04 are being supplied by their Emergency Diesel Generators.
- 4.16 kV and 480 VAC buses 1A01/1B01 and 1A02/1B02 are de-energized.
- The G501 diesel generator ("Dinky Diesel") is currently running and supplying the G05 Gas Turbine auxiliaries.
- Because of the failure (fault) associated with the 13.8 kV H01 bus, the G05 Gas Turbine cannot be used and is NOT running.
- An Unusual Event emergency classification has been declared by the Shift Manager per EAL 3.1.1.1
- Additional ERO resources have been called in for support, however, the TSC currently has no power.

**INITIATING CUES (IF APPLICABLE):**

The Shift Manager has requested that you supply the TSC with emergency power per EPIP 4.1, Attachment C.

SUPPLY THE TSC WITH EMERGENCY POWER

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

START TIME	STEP/SEQUENCE/CRITICAL			SAT
	1	1	N	UNSAT

---

**ELEMENT:** Attachment C of EPIP 4.1 reviewed, applicable section/steps needed to perform task determined.

**STANDARD:** Section 2.0 "Operation" determined to be the appropriate section of Attachment C to perform.

**CUE:** If examinee expresses concern with the third CAUTION (directly above Step 2.1.1), indicate that supervision is generating a tag series to ensure both breakers will not be closed simultaneously.

**COMMENTS:**

---

	STEP/SEQUENCE/CRITICAL			SAT
	2	1	N	UNSAT

---

**ELEMENT:** Place breaker 52T control switch to open.

**STANDARD:** Breaker 52T control switch placed in the open position.

**CUE:** Breaker 52T control switch is in the open position, the green and red indicating lights are off.

**NOTE:** *Both indicating lights are off for breaker 52T since the switch is not in the circuit with the Auto/Manual selector switch in the Auto position. Also, breaker 52T control switch should normally be found in the "Auto" position and cannot Auto close if breaker 52E is shut (the given lineup). This step would be considered critical if breaker 52T control switch was found in the "Close" position.*

**COMMENTS:**

---

	STEP/SEQUENCE/CRITICAL			SAT
	3	2	Y	UNSAT

---

**ELEMENT:** Place the Auto/Manual selector switch to MANUAL.

**STANDARD:** Auto/Manual selector switch on panel H-507 is placed in MANUAL.

**CUE:** The Auto/Manual Control switch is in MANUAL, green light is lit for breaker 52T.

**COMMENTS:**

---



SUPPLY THE TSC WITH EMERGENCY POWER

---

**PERFORMANCE INFORMATION**

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

	STEP/SEQUENCE/CRITICAL		SAT
	4	3	Y
			UNSAT
<b>ELEMENT:</b>	Breaker to 5G (G05) auxiliaries opened locally.		
<b>STANDARD:</b>	Breaker 52E is locally opened using its control switch on panel H-507.		
<b>CUE:</b>	Red light is lit above breaker 52E (prior to reaching this step). After manipulation, the green light is lit above breaker 52E.		
<b>COMMENTS:</b>			

---

	STEP/SEQUENCE/CRITICAL		SAT
	5	4	Y
			UNSAT
<b>ELEMENT:</b>	TSC loads are energized by closing breaker 52T.		
<b>STANDARD:</b>	Breaker 52T is closed locally by placing its control switch in the close position.		
<b>CUE:</b>	Red light is lit above control switch for breaker 52T.		
<b>COMMENTS:</b>			

---

**SUPPLY THE TSC WITH EMERGENCY POWER**

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**PERFORMANCE INFORMATION**

**NOTE:**     *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

	STEP/SEQUENCE/CRITICAL	SAT
	6        5        N	UNSAT
<b>ELEMENT:</b>	Shift Manager is notified that Attachment C of EPIP 4.1 is complete.	_____
<b>STANDARD:</b>	Shift Manager contacted and notified of Attachment C status.	_____
<b>CUE:</b>	The Shift Manager acknowledges the report.	
<b>COMMENTS:</b>		

---

**TERMINATION CUE:**     THIS COMPLETES THE JPM.                      **COMPLETION TIME:**     \_\_\_\_\_

MONITOR THE CONTROL ROOM VENTILATION  
SYSTEM FOR PROPER OPERATION

A.3 S20

K/A REFERENCE: Gen - 2.3.10 (2.9/3.3)  
(NUREG-1122)

ALTERNATE PATH JPM \_\_\_\_\_ YES X NO

**PERFORMANCE CHECKLIST:**

**SATISFACTORY** - Properly performed critical step(s) and/or in sequence (if applicable)

**UNSATISFACTORY** - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.

Enter identifier here: OI-90 "Control, Computer, and Cable  
Spreading Room Ventilation Systems"

\_\_\_\_\_ Other document adequately describes necessary task elements.

Enter identifier here: \_\_\_\_\_

X Task elements described as attached.

**DESIRED MODE OF EVALUATION:**

**APPLICABLE EVALUATION SETTING:**

SIMULATE/WALKTHROUGH X DISCUSSION X PERFORM \_\_\_\_\_ IN-PLANT \_\_\_\_\_ CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 8 MINUTES

POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P088.004COT  
Revision 0 DRAFT  
August 27, 2001

MONITOR THE CONTROL ROOM VENTILATION  
SYSTEM FOR PROPER OPERATION

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EXAMINEE \_\_\_\_\_ EVALUATOR \_\_\_\_\_

START TIME \_\_\_\_\_ FINISH TIME \_\_\_\_\_

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☐ COT ☐ SRO ☐ STA

TOOLS/EQUIPMENT/REFERENCES:

OI-90 "Control, Computer, and Cable Spreading Room Ventilation Systems" Rev 15

TASK STANDARDS:

The Control Room Ventilation System is aligned to Mode 4 per OI-90.

SIMULATOR INFORMATION:

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
	C.F.	HVA17	2					
	C.F.	RMS32	1	1000				
Insert the above 2 component failures prior to JPM performance. Any simulator IC which has the Control Room Ventilation system in a normal (Mode 1) alignment may be used. Silence and acknowledge all annunciators prior to starting JPM. Ensure RE-235 is in alarm prior to starting JPM (this may take a few seconds after going to RUN due to the RMS averaging function).								

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MONITOR THE CONTROL ROOM VENTILATION  
SYSTEM FOR PROPER OPERATION

---

**READ AND PROVIDE TO THE EXAMINEE**

\*\*\*\*\*

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**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

\*\*\*\*\*

**INITIAL CONDITIONS:**

You are the BOP Operator (3<sup>rd</sup> license).  
A failure of Control Room Noble Gas Monitor RE-235 has resulted in a high alarm condition.

**INITIATING CUES (IF APPLICABLE):**

The DOS has requested that the Control Room Ventilation System be verified in Mode 4 per Section 5.4.3 of OI-90 in order to comply with Technical Specification requirements.

MONITOR THE CONTROL ROOM VENTILATION  
SYSTEM FOR PROPER OPERATION

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

START TIME	STEP/SEQUENCE/CRITICAL			SAT
	1	1	N	UNSAT

---

**ELEMENT:** Ensure repositioning of dampers for control, computer, and cable spreading rooms.

**STANDARD:**

- Control Room Dampers Solenoid (100% recirc solenoid) SV-4852 ensured closed (purple light is lit).
- W-13B1/B2 CR Recirc Fan Outside Air Suction Damper CV-4849C ensured closed.
- W-13A1/A2 CSR Recirc Fan Outside Air Suction Damper CV-4850 ensured closed.
- CR Toilet Exhaust Fan Isolation Damper CV-6748 ensured closed.

**CUE:**

- Purple light is lit for SV-4852 (or as indicated on simulator).
- Green light is lit, red light is off for CV-4849C (or as indicated on simulator).
- Green light is lit, red light is off for CV-4850 (or as indicated on simulator).
- **CV-6748 is closed (NOTE: This damper has been recently added per a series of Control Room Ventilation modifications currently in progress. Indication is not available in the simulator.**

**COMMENTS:**

---

	STEP/SEQUENCE/CRITICAL			SAT
	2	1	N	UNSAT

---

**ELEMENT:** Ensure the selected F-16 CR Charcoal Filter Fan, W-14A or W-14B starts.

**STANDARD:** Either W-14A or W-14B checked running.

**CUE:** **The toilet room exhaust fan W-15 is stopped.**  
Red light is lit above the selected fan (or as indicated on simulator).

**COMMENTS:**

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MONITOR THE CONTROL ROOM VENTILATION  
SYSTEM FOR PROPER OPERATION

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

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	STEP/SEQUENCE/CRITICAL		SAT
	3	1	N
			UNSAT
<b>ELEMENT:</b>	Ensure Control Room Recirc Fan W-13B1 or W-13B2 remains running.		
<b>STANDARD:</b>	Either W-13B1 or W-13B2 checked running.		
<b>CUE:</b>	Red light is lit above one of the fans (or as indicated on simulator).		
<b>COMMENTS:</b>			

---

	STEP/SEQUENCE/CRITICAL		SAT
	4	1	N
			UNSAT
<b>ELEMENT:</b>	Ensure control room filtration alarm annunciates.		
<b>STANDARD:</b>	Control room alarm C01 B 4-9 "Control Room Ventilation Recirculation Mode" is lit.		
<b>CUE:</b>	C01 B 4-9 is lit (or as indicated on simulator).		
<b>COMMENTS:</b>			

---

	STEP/SEQUENCE/CRITICAL		SAT
	5	1	Y
			UNSAT
<b>ELEMENT:</b>	Ensure W-14A/B CR Charcoal Filter Fan Outside Air Suction Control Damper CV-4851A is open.		
<b>STANDARD:</b>	CV-4851A is found shut, control switch is used to manually reposition damper to the open position.		
<b>CUE:</b>	Prior to switch manipulation, the green light is lit for CV-4851A (or as indicated on simulator). If control switch for CV-4851A is placed in the open position, then the red light is lit for CV-4851A (or as indicated on simulator).		
<b>COMMENTS:</b>			

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MONITOR THE CONTROL ROOM VENTILATION  
SYSTEM FOR PROPER OPERATION

---

PERFORMANCE INFORMATION

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

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	STEP/SEQUENCE/CRITICAL	SAT
	6 1 N	UNSAT
<b>ELEMENT:</b>	Ensure W-14A/B CR Charcoal Filter Fan Discharge Control Damper CV-4851C is open.	
<b>STANDARD:</b>	CV-4851C is checked open.	
<b>CUE:</b>	Red light is lit, green light is off for CV-4851A (or as indicated on simulator).	
<b>COMMENTS:</b>		

---

	STEP/SEQUENCE/CRITICAL	SAT
	7 2 N	UNSAT
<b>ELEMENT:</b>	Ensure control room pressure on indicator VNCR DPI-4713B is greater than or equal to 0.125 inches of water with respect to turbine building.	
<b>STANDARD:</b>	VNCR DPI-4713B checked to very pressure reading.	
<b>CUE:</b>	Control room delta-P is currently 0.15 inches of water.	
<b>COMMENTS:</b>		

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	STEP/SEQUENCE/CRITICAL	SAT
	8 3 N	UNSAT
<b>ELEMENT:</b>	DOS is notified of the control room ventilation system status.	
<b>STANDARD:</b>	DOS is notified that the control room ventilation system is now in Mode 4, as well as failure of CV-4851A to automatically reposition.	
<b>CUE:</b>	DOS acknowledges the report.	
<b>COMMENTS:</b>		

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**TERMINATION CUE:** THIS COMPLETES THE JPM.

**COMPLETION TIME:** \_\_\_\_\_



POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P028.001EMR  
Revision 0 DRAFT  
August 27, 2001

CLASSIFY AN EVENT PER THE EMERGENCY PLAN

A.4 SRO

K/A REFERENCE: Gen - 2.4.41 (2.3/4.1)  
(NUREG-1122) Gen - 2.4.44 (2.1/4.0)

ALTERNATE PATH JPM \_\_\_\_\_ YES X NO

PERFORMANCE CHECKLIST:

SATISFACTORY - Properly performed critical step(s) and/or in sequence (if applicable)

UNSATISFACTORY - Improperly performed critical step(s) and/or out of sequence (if applicable)

X Procedure adequately addresses task elements.  
Enter identifier here: EPIP 1.1, 1.2, and 2.1

\_\_\_\_\_ Other document adequately describes necessary task elements.  
Enter identifier here: \_\_\_\_\_

X Task elements described as attached.

DESIRED MODE OF EVALUATION:

APPLICABLE EVALUATION SETTING:

SIMULATE/WALKTHROUGH X DISCUSSION \_\_\_\_\_ PERFORM \_\_\_\_\_ IN-PLANT \_\_\_\_\_ CONTROL ROOM X

VALIDATED TIME FOR COMPLETION: 20 MINUTES

POINT BEACH NUCLEAR PLANT  
TRAINING JOB PERFORMANCE MEASURES

JPM P028.001EMR  
Revision 0 DRAFT  
August 27, 2001

**CLASSIFY AN EVENT PER THE EMERGENCY PLAN**

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EXAMINEE \_\_\_\_\_ EVALUATOR \_\_\_\_\_

START TIME \_\_\_\_\_ FINISH TIME \_\_\_\_\_

PERFORMANCE ☐ SAT ☐ UNSAT

JOB TITLE: ☐ AOT ☐ COT ☐ SRO ☐ STA

**TOOLS/EQUIPMENT/REFERENCES:**

EPIP 1.1 "Course of Actions" Rev 37  
EPIP 1.2 "Emergency Classification" Rev 34  
EPIP 2.1 "Notifications – ERO, State & County, and NRC" Rev 22

**TASK STANDARDS:**

A General Emergency is declared.  
Identified critical sections EPIP 2.1 Attachment B is completed correctly and within the required time frame.

**SIMULATOR INFORMATION:**

TIME	FAIL	COMPONENT	OPTION	VALUE	RAMP	DELAY	ACT	COND
NONE								

**NOTE:** *If this JPM is performed on the simulator, the JPM administrator should only give cues that are not indicated on the simulator. If simulator indication is sufficient to indicate the completion of a step, the JPM administrator should not have to give a cue to the trainee to continue the evolution.*

**NOTE:** *Only this page needs to be retained in examinee's record if completed satisfactorily. If unsatisfactory performance is demonstrated, the entire JPM should be retained.*

**CLASSIFY AN EVENT PER THE EMERGENCY PLAN**

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**READ AND PROVIDE TO THE EXAMINEE**

\*\*\*\*\*

**THIS SECTION IS READ ONCE FOR THE ENTIRE PACKAGE OF JPMs. IT IS NOT REQUIRED TO REVIEW THIS SECTION FOR EVERY JPM BEING PERFORMED IN THE PACKAGE. THE INITIAL CONDITIONS AND INITIATING CUE(S)/TASKS TO BE PERFORMED SHOULD BE READ AND THEN PROVIDED TO THE EXAMINEE.**

After I read you the initial conditions and initiating cue(s)/task to be performed for this JPM and provide you a copy of the same, you may review and begin. Once you have completed the task, indicate completion by handing back this form to the evaluator unless otherwise told.

You may use any approved reference materials normally available including logs. Make all written reports, oral reports, and log entries as if the evolution is actually being performed.

EOP Immediate Actions are required to be performed from memory. After completing immediate action steps without using the procedure, you may then use any approved reference materials.

For all two and three-way communications, make your report to me, the JPM evaluator. I will reply to your reports with the statement, "acknowledge." All actions in the plant are to be simulated and all actions in the simulator will be performed. Ensure you make it clear to me, the evaluator, of all actions you are taking so that credit may be given for completing each step of the task.

**DURING THE JPM, ENSURE PROPER SAFETY PRECAUTIONS, FME, AND/OR RADIOLOGICAL CONCERNS AS APPLICABLE ARE FOLLOWED.**

\*\*\*\*\*

**INITIAL CONDITIONS:**

You are the Operating Supervisor (OS).

Unit 1 was manually tripped due to an RCS leak, which exceeded the makeup capacity of the 3 operable charging pumps. A complete loss of off-site power occurred after the trip, coupled with failures of the Emergency Diesel Generator system, and has resulted in 4160 V AC buses 1A05 and 1A06 being de-energized for 22 minutes.

RCS pressure is 75 psig and lowering.

Pressurizer level is off-scale low.

Core Exit Thermocouples indicate 670 °F.

Reactor Vessel Level indicates 22 feet (narrow range).

Containment pressure is 62 psig and rising.

All 3 Containment High Range Monitors are indicating 200 R/hr.

Containment Sump 'B' is at 22 inches.

'A' Steam Generator level is at 45%, 'B' Steam Generator level is at 43%

Auxiliary feedwater flow is 380 gpm.

Wind speed and direction (both inland and at site) is 10 mph and 270°.

There are no radioactive releases in progress, but a potential exists for a gaseous release to the atmosphere.

The control room crew is implementing the appropriate emergency procedures.

The Shift Manager is implementing the Emergency Plan.

**INITIATING CUES (IF APPLICABLE):**

The Shift Manager is implementing EPIP 1.1 and has requested your assistance. You are to perform the following:

- Per step 5.5 of EPIP 1.1, classify the event based only on the above conditions using EPIP 1.2
- After classifying the event, perform step 5.8.2 of EPIP 1.1 for notification of State & Counties. Steps 5.6, 5.7, and 5.8.1 of EPIP 1.1 will be performed by another SRO. This portion of the JPM is time critical.

**CLASSIFY AN EVENT PER THE EMERGENCY PLAN**

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**PERFORMANCE INFORMATION**

**NOTE:** *CRITICAL STEPS ARE DENOTED WITH A "Y". FAILURE TO MEET THE STANDARDS FOR THIS ITEM CONSTITUTES FAILURE.*

---

START TIME	STEP/SEQUENCE/CRITICAL	SAT
	1 1 Y	UNSAT

---

**ELEMENT:** Determine the category of the event using Attachment A, B, and C of EPIP 1.2.

**STANDARD:** Examinee determines that a General Emergency declaration is required based on EAL 1.1.1.4

- Containment pressure is greater than 60 psig (containment exceeds the loss threshold).
- The RCS also exceeds the loss threshold due to the large leak rate.
- The Fuel Clad is challenged based on vessel level < 25 feet and CETs < 700 °F.

**CUE:**

**COMMENTS:**

---

STEP/SEQUENCE/CRITICAL	SAT
2 2 Y	UNSAT

---

**ELEMENT:** Appropriate sections of Attachment B EPIP 2.1 filled out correctly.

**STANDARD:** Attachment B completed consistent with given conditions and within required time frame (< 15 minutes). Time critical portion starts at the time of declaration and ends when the Emergency Director approval is requested.  
A completed Attachment B is attached for grading purposes. Critical step items of Attachment B include items 3, 4, and 9.

**CUE:** When the examinee requests approval from the Emergency Director (Shift Manager), the JPM is complete.

**COMMENTS:**

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**TERMINATION CUE:** THIS COMPLETES THE JPM.

**COMPLETION TIME:** \_\_\_\_\_

POINT BEACH NUCLEAR PLANT  
EMERGENCY PLAN IMPLEMENTING PROCEDURES

EPIP 2.1  
NNSR  
Revision 23  
December 14, 2001

NOTIFICATIONS - ERO, STATE & COUNTIES, AND NRC

ATTACHMENT B  
NUCLEAR ACCIDENT REPORTING FORM

NOTE: Direct state and counties to record the information on the State of Wisconsin Nuclear Accident Reporting (NARS) form.

Reason for Call: <input checked="" type="checkbox"/> Initial Report <input type="checkbox"/> Update <input type="checkbox"/> EAL Change <input type="checkbox"/> PAR Change						
<b>1. Status</b> (A) Actual (C) Drill (B) Exercise	<b>2. Station</b> (T) Point Beach (U) - U2 - Both	<b>3. On-site Incident Classification</b> (A) Unusual Event (D) General Emergency (B) Alert (E) Recovery (C) Site Emergency (F) Termination				
<b>4. Incident Classification/Termination</b> Time: <u>Actual</u> / _____ Date: <u>Actual</u> / _____ EAL # <u>1.1.1.4</u>	<b>5. Release to Environment</b> (as a result of classified event) (A) None (B) Potential (C) Occurring (D) Terminated	<b>6. Type of Release</b> (mark all that apply) (A) Not Applicable (B) Atmospheric (C) Liquid (D) Uncontrolled (E) Unmonitored				
<b>7. Wind Direction</b> Degrees From: <u>270°</u> Downwind Sector: <u>D, E, F</u>	<b>8. Wind Speed</b> (B) Miles/hr: <u>10</u>	} These may be circled at discretion of performer.				
<b>9. Protective Actions Recommended</b> (A) None (B) Evacuate 0-2 mile radius (C) Evacuate 0-5 miles radius (F) Other _____	(D) Evacuate 2-5 miles for Sectors <u>D, E, F</u> (E) Evacuate 5-10 miles for Sectors _____					
<b>10. Additional Information From EAL Table:</b> <u>Additional information may be added here as necessary</u>						
Emergency Director Approval: _____ Date / Time _____ / _____						
<b>11. Immediately upon Emergency Director approval, relay information to Emergency Managements (EM) listed.</b> Request the answering parties to have the appropriate EM personnel call 920/____-____ for notification verification. State/County message transmitted by _____ in the Point Beach Nuclear Plant _____ (Name) (CR/TSC/EOF/AEOF)						
<b>12. STATE/COUNTY ANSWERED</b>		<b>CALLBACK VERIFICATION</b>				
<u>Agency</u>	<u>Time</u>	<u>Name</u>	<u>Position</u>	<u>Time</u>	<u>Name</u>	<u>Contact Phone #</u>
Manitowoc Co	_____	_____	EM Director	_____	_____	_____
Kewaunee Co	_____	_____	EM Director	_____	_____	_____
Wisconsin	_____	_____	Duty Officer	_____	_____	_____
<b>13. NRC ANSWERED - Callback Verification Not Required</b> Duty Officer Name _____ Time _____ Continuous phone link requested: ___ No ___ Yes NRC message transmitted by _____ in the Point Beach Nuclear Plant _____ (Name) (CR/TSC/EOF/AEOF)						