

Facility: Turkey Point Units 3 &amp; 4

Date of Examination: 2/23/09

Exam Level: RO

Operating Test Number: 2009-301

Administrative Topic (See Note)	Type Code (See Note)	Describe Activity to be performed
A.1 Conduct of Operations	CR, N	Perform a Manual RCS Leakrate Calculation (2.1.7 RO 4.4)
N/A	N/A	N/A
A.2 Equipment Control	C, N	Perform an Equipment Operability Verification (2.2.12 RO 3.7)
A.3 Radiation Control	CR, M	Determine Dose Rates and Radiological Requirements From a Survey Map (2.3.7 RO 3.5 SRO 3.6)
A.4 - RO Emergency Plan	CR, N	Complete a Florida State Notification Form (2.4.39 RO 3.9)
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.		
* Types and Codes (C) Control Room (S) Simulator (CR) Classroom (D)irect from bank ( ≤3 for ROs, ≤4 for SROs) (N)ew or (M)odified from bank (≥1) (P)revious 2 Exams (≤1 Randomly selected)		

Facility: Turkey Point Units 3 &amp; 4

Date of Examination: : 2/23/09

Exam Level: SRO (U) &amp; (I)

Operating Test Number: 2009-301

Administrative Topic (See Note)	Type Code (See Note)	Describe Activity to be performed
A.1.a Conduct of Operations	CR, N	Perform a Review of a Manual RCS Leakrate Calculation (2.1.7 SRO 4.7)
A.1.b Conduct of Operations	CR, N	Review 3-OP-062, Safety Injection Attachments (2.1.29 SRO 4.0)
A.2 Equipment Control	CR, N	Determine Required Actions for Instrumentation Failure (2.2.22 SRO 4.7)
A.3 Radiation Control	CR, M	Determine Dose Rates and Radiological Requirements From a Survey Map (2.3.7 RO 3.5 SRO 3.6)
A.4 - SRO Emergency Plan	CR, N	Classify Event and Determine PARS (2.4.41 SRO 4.6)

NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.

\* Types and Codes (C) Control Room (S) Simulator (CR) Classroom  
(D)irect from bank ( ≤3 for ROs, ≤4 for SROs)  
(N)ew or (M)odified from bank (≥1)  
(P)revious 2 Exams (≤1 Randomly selected)

Facility: Turkey Point Task No: 01041036100  
Task Title: Perform a Manual Leakrate Calculation JPM No: R.A.1  
K/A Reference: 2.1.7 RO 4.4  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance X Actual Performance \_\_\_\_\_  
Classroom X Simulator \_\_\_\_\_ Plant \_\_\_\_\_

**Read to the examinee:**

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

## Initial Conditions:

- Unit 4 is at 100% power, steady state.
- All 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation" prerequisites have been met.
- Combined Charging Pump primary packing leakage is 0.05 gpm
- Primary to Secondary Leakage is 0.0 gpm
- Non-Reactor Coolant Pressure Boundary (RCPB) Leakage is 0.0 gpm

## Task Standard:

- RCS leak rates are calculated using 4-OSP-041.1 Reactor Coolant System Leak Rate Calculation
- Acceptance criteria for 4-OSP-041.1 Reactor Coolant System Leak Rate Calculation is verified **NOT** met

## Required Materials:

- 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation", Attachment 3 Leak Rate Calculation Data Sheet (Manual Method).
- Calculator

## General References:

- 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation"

Initiating Cue:

- You are the Unit 4 RCO on Peak Shift and have been directed to perform an RCS leak rate calculation by completing 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation" Attachment 3 Leak Rate Calculation Data Sheet (Manual Method).
- The start and stop data for the leakrate calculation are provided to you on the JPM Briefing Sheet.

Time Critical Task: No

Validation Time: 30 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**



Reset to IC #

N/A

SIMULATOR SETUP

DRAFT

*Denote critical steps with a check mark(✓)*

		Start Time
STEP 1 :	Obtain a copy of 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Copy of 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation is obtained.	
<u>Cue</u>	Provide a copy of 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation Attachment 3, Leak Rate Calculation Data Sheet (Manual Method) for Peak shift page 32 & 33.	
<u>Comment</u>		

STEP 2 : ✓	Record Start Data (4-OSP-041.1, step 7.1.2.7.c and Attachment 3 page 1 steps 1-9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Examinee records the data under "Start" column on Attachment 3, Page 1.	
<u>Comment</u>		
<b>NOTE:</b>	The start data is provided to the examinee on the JPM briefing sheet.	
<b>NOTE:</b>	Procedure note Recommended minimum duration for the calculation is four hours. The data provided in the initiating cue is four hours.	

STEP 3 : ✓	Record Stop Data (4-OSP-041.1, step 7.1.2.10.c and Attachment 3 page 1 steps 1-9)	SAT ____ UNSAT ____
<u>Standard:</u>	Examinee records the data under "Stop" column on Attachment 3, Page 1.	
<u>Comment</u>		
<b>NOTE:</b>	The stop data is provided to the examinee on the JPM briefing sheet.	

STEP 4 : ✓	Determine RCS Leak Rate. (4-OSP-041.1, step 7.1.2.15.c and Attachment 3 page 1 steps 10-14)	SAT ____ UNSAT ____
<u>Standard:</u>	Examinee calculates the RCS Gross Leak Rate of $1.3 \text{ gpm} \pm 0.1 \text{ gpm}$ <b>AND</b> Examinee calculates the RCS Identified Leak Rate of $0.13 \pm 0.01 \text{ gpm}$ <b>AND</b> Examinee calculates the RCS Unidentified Leak Rate of $1.17 \pm 0.1 \text{ gpm}$	
<u>Comment</u>		
<b>NOTE:</b>	The procedure note for this step of the procedure ONLY applies to obtaining data using the PC method.	
<b>NOTE:</b>	See attached ATTACHMENT 3 key for all calculation results and reference numbers.	

STEP 5 :	SM Notified that gross leak rate is greater than 1 gpm. (4-OSP-041.1, Attachment 3 page 1 Note 1)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Examinee notifies the Shift Manager that gross leak rate is greater than 1 gpm due to unidentified leakage > 1.0 gpm.	
<u>Cue</u>	When asked provide the following cue, "The Shift Manager has been informed."	
<u>Comment</u>		

STEP 6 ✓	Determine surveillance acceptance criteria (4-OSP-041.1, Attachment 3 page 2)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Examinee determines surveillance acceptance criteria are NOT met due to Unidentified RCS Leakage being greater than 1 gpm..	
<u>Comment</u>		
<b>NOTE:</b>	Surveillance acceptance criteria are <b>NOT</b> met due to Unidentified RCS Leakage in excess of 1 gpm.	

<b>Terminating Cue:</b>	<b>When the examinee determines acceptance criteria is NOT met, provide the following cue, "Another Operator will complete the remaining steps of this procedure."</b>	<b>STOP</b>
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Stop Time \_\_\_\_\_

**Verification of Completion**Job Performance Measure No. RA.1

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_

## **JPM BRIEFING SHEET**

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

### **INITIAL CONDITIONS:**

- Unit 4 is at 100% power, steady state.
- All 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation" prerequisites have been met.
- Primary to Secondary Leakage is 0.0 gpm
- Combined Charging Pump primary packing leakage is 0.05 gpm
- Non-Reactor Coolant Pressure Boundary (RCPB) Leakage is 0.0 gpm

### **INITIATING CUE:**

- You are the Unit 4 RCO on Peak Shift and have been directed to perform an RCS leak rate calculation by completing 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation" Attachment 3 Leak Rate Calculation Data Sheet (Manual Method).
- The start and stop data for the leakrate calculation are provided to you on the JPM Briefing Sheet.

START DATA		STOP DATA	
Parameter	Value	Parameter	Value
Time	1900	Time	2300
VCT Level	50	VCT Level	28
PZR level	53%	PZR level	53%
PW Totalizer	0	PW Totalizer	0
BA Totalizer	0	BA Totalizer	0
PRT level	71%	PRT level	71%
RCDT level	15%	RCDT level	25%
Cont. Sump level	120 gal.	Cont. Sump level	120 gal.
Tavg	574°F	Tavg	574°F

Acknowledge to the examiner when you are ready to begin.

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.**

Facility: Turkey Point Task No: 01041036100  
Task Title: Review a Leakrate Calculation JPM No: S.A.1.a  
K/A Reference: 2.1.7 SRO 4.7  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance X Actual Performance \_\_\_\_\_  
Classroom X Simulator \_\_\_\_\_ Plant \_\_\_\_\_

**Read to the examinee:**

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

## Initial Conditions:

- Unit 4 is at 100% power, steady state.
- All 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation" prerequisites have been met.
- ERDADS is not available.

## Task Standards:

- The error in the RCS leak rates calculated using 4-OSP-041.1 Reactor Coolant System Leak Rate Calculation is discovered.
- Determination is made that acceptance criteria for 4-OSP-041.1 Reactor Coolant System Leak Rate Calculation is **NOT** met
- Determination is made that compliance with Technical Specification LCO 3.4.6.2.b Action b is required within four hours to maintain continued plant operation.

## Required Materials:

- A completed copy of 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation".
- Calculator

## General References:

- 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation"
- Technical Specifications TURKEY POINT - UNITS 3 & 4

Initiating Cue:

- You are the Unit 4 Unit Supervisor on Peak Shift and have been directed to perform the review of the completed 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation", and determine any required actions. The RCS leak rate calculation was made using the manual method of Attachment 3.

Time Critical Task: No

Validation Time: 30 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**



SIMULATOR SETUPReset to IC #N/A

*Denote critical steps with a check mark(✓)*

Start Time \_\_\_\_\_

STEP 1 :	Obtain a copy of 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Copy of 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation is obtained.	
<u>Cue</u>	Provide a copy of the completed 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation.	
<u>Comment</u>		
<b>NOTE:</b>	Procedure note Recommended minimum duration for the calculation is four hours. The data provided in the initiating cue is four hours.	

STEP 2 : ✓	Review the completed 4-OSP-041.1, Reactor Coolant System Leak Rate Calculation. (4-OSP-041.1, Attachment 3 page 1 and 2)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee discovers the error in the RCS leak rates calculated using 4-OSP-041.1 Reactor Coolant System Leak Rate Calculation by reviewing the completed 4-OSP-041.1, Attachment 3.	
<u>Comment</u>		
<b>NOTE:</b>	The omission of the Primary Water added causes an underestimation of 0.42 gpm to the calculated RCS Gross Leak Rate. The calculated RCS Gross Leak Rate should be 1.3 + 0.1 gpm The calculated RCS Unidentified Leak Rate should be 1.12 + 0.1 gpm See the exam key for a copy of the completed attachment.	

STEP 3 :	SM Notified that gross leak rate is greater than 1 gpm. (4-OSP-041.1, Attachment 3 page 1 Note 1)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Examinee notifies the Shift Manager that gross leak rate is greater than 1 gpm.	
<u>Cue</u>	When asked provide the following cue, "The Shift Manager has been informed."	
<u>Comment</u>		

STEP 4 : ✓	Determine surveillance acceptance criteria (4-OSP-041.1, Attachment 3 page 2)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Examinee determines surveillance acceptance criteria are NOT met due to Unidentified RCS Leakage being greater than 1 gpm..	
<u>Comment</u>		
<b>NOTE:</b>	<p>The leakrate calculation error results in the surveillance acceptance criteria inaccurately depicted as acceptable.</p> <p>If the error is detected and corrected, the surveillance acceptance criteria are <b>NOT</b> met due to Unidentified RCS Leakage in excess of 1 gpm.</p>	

STEP 5 : ✓	Refer to applicable Tech Specs (4-OSP-041.1, step 7.1.2.21.a)  (Technical Specification LCO 3.4.6.2.b)	SAT ____ UNSAT ____
Standard:	<b>AND</b>  Examinee determines Technical Specification LCO 3.4.6.2.b Action b is applicable.  Determines continued operation with the existing leakrate is only allowed for up to four hours.	
Cue	Provide a copy of Sections 3/4.4.6 REACTOR COOLANT SYSTEM LEAKAGE.	
Comment		
NOTE:	The examinee must detect the error in the leakrate calculation to implement this step of the surveillance procedure.	
Terminating Cue:	<b>When the examinee determines continued operation with the existing leakrate is only allowed for up to four hours, inform the examinee the task is complete.</b>	<b>STOP</b>

Stop Time \_\_\_\_\_

**Verification of Completion**Job Performance Measure No. S.A.1.a

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_

## **JPM BRIEFING SHEET**

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

### **INITIAL CONDITIONS:**

- Unit 4 is at 100% power, steady state.
- All 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation" prerequisites have been met.
- ERDADS is not available.

### **INITIATING CUE:**

- You are the Unit 4 Unit Supervisor on Peak Shift and have been directed to perform the review of the completed 4-OSP-041.1, "Reactor Coolant System Leak Rate Calculation", and determine any required actions. The RCS leak rate calculation was made using the manual method of Attachment 3.

START DATA		STOP DATA	
Parameter	Value	Parameter	Value
Time	1900	Time	2300
VCT Level	50	VCT Level	35
PZR level	53%	PZR level	53%
PW Totalizer	0	PW Totalizer	100
BA Totalizer	0	BA Totalizer	0
PRT level	71%	PRT level	71%
RCDT level	15%	RCDT level	25%
Cont. Sump level	120 gal.	Cont. Sump level	120 gal.
Tavg	574°F	Tavg	574°F

Acknowledge to the examiner when you are ready to begin.

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.**

Facility: Turkey Point Task No: 1062009100  
Review Safety Injection  
Attachments Prior to Mode  
Task Title: Change JPM No: S.A.1.b  
K/A Reference: 2.1.29 SRO 4.0  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance X Actual Performance \_\_\_\_\_  
Classroom X Simulator \_\_\_\_\_ Plant \_\_\_\_\_

**Read to the examinee:**

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

## Initial Conditions:

- Unit 3 is in MODE 4 325° F making preparations for mode ascension to MODE 3.
- 3-GOP-503, Cold Shutdown to Hot Standby is in progress at step 5.25.10.
- Unit 4 is in MODE 6.
- Unit 4 Core offload is in progress
- The Unit 4 RWST is INOPERABLE due to low level.
- All other equipment is OPERABLE.

## Task Standard:

- Examinee identifies five valves that preclude the Unit 4 HHSI pumps from being aligned to the Unit 3 (OPERABLE) RWST.

## Required Materials:

- 3-GOP-503, Cold Shutdown to Hot Standby
- 3-NOP-062, Safety Injection
- Technical Specifications

## General References:

- 3-GOP-503, Cold Shutdown to Hot Standby
- 3-NOP-062, Safety Injection
- Technical Specifications

Initiating Cue:

- You are the Unit 3 Unit Supervisor. You have been directed to complete step 5.25.10, verify all four (4) HHSL pumps are aligned to an operable RWST by reviewing the 3-NOP-62 Attachments 1 through 3, Safety Injection valve alignments.

Time Critical Task: No

Validation Time: 30 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**



SIMULATOR SETUPReset to IC #

N/A

*Denote critical steps with a check mark(✓)*

		Start Time _____
STEP 1 :	Obtain a copy of 3-GOP-503, Cold Shutdown to Hot Standby and 3-NOP-062, Safety Injection	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Copy of 3-GOP-503, Cold Shutdown to Hot Standby is obtained.	
<u>Cue</u>	Provide a completed copy of 3-GOP-503, Cold Shutdown to Hot Standby page 50.	
<u>Comment</u>		
STEP 2 : ✓	Verify all 4 HHSI pumps are aligned to an OPERABLE RWST. (3-GOP-503, Cold Shutdown to Hot Standby Step 5.25.10) (3-NOP-062, Safety Injection Attachments 1 through 3.)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The Examinee reviews 3-NOP-062, Safety Injection Attachments 1 through 5 and determines the Unit 4 HHSI pumps are NOT aligned to an OPERABLE RWST by noting all the following discrepancies to the evaluator.  1. 4-864C      LOCKED OPEN & BACKSEATED 2. 870A        CLOSED 3. 870B        CLOSED 4. 892A        LOCKED CLOSED 5. 892B        LOCKED CLOSED	
<u>Cue</u>	Provide a completed copy of 3-NOP-062, Safety Injection Attachments 1 through 3.	
<u>Comment</u>		

Terminating Cue:	The task is complete when the Examinee returns the cue sheet to the examiner.	STOP
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Stop Time \_\_\_\_\_

DRAFT

**Verification of Completion**

Job Performance Measure No. S.A.1.b

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_

## **JPM BRIEFING SHEET**

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

### **INITIAL CONDITIONS:**

- Unit 3 is in MODE 4 325° F making preparations for mode ascension to MODE 3.
- 3-GOP-503, Cold Shutdown to Hot Standby is in progress at step 5.25.10.
- Unit 4 is in MODE 6.
- Unit 4 Core offload is in progress
- The Unit 4 RWST is INOPERABLE due to low level.
- All other equipment is OPERABLE.

### **INITIATING CUE:**

- You are the Unit 3 Unit Supervisor. You have been directed to complete step 5.25.10, verify all four (4) HHSI pumps are aligned to an operable RWST by reviewing the 3-NOP-62 Attachments 1 through 3, Safety Injection valve alignments.

**Acknowledge to the examiner when you are ready to begin.**

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.**

Facility: Turkey Point Task No: 1023006200  
Task Title: Equip Operability Verification JPM No: R.A.2  
K/A Reference: 2.2.12 RO 3.7  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance \_\_\_\_\_ Actual Performance X  
Classroom \_\_\_\_\_ Simulator \_\_\_\_\_ Plant X

**Read to the examinee:**

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

## Initial Conditions:

- Unit 3 and 4 are both in Mode 1
- Preparations are in progress to perform a monthly test of the Unit 4 B Diesel Generator using 4-OSP-23.1 Diesel Generator Operability Test section 7.2.
- Step 7.2.1 of 4-OSP-23.1 Diesel Generator Operability Test is complete.

## Task Standard:

- 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable, Attachment 9 is complete.

## Required Materials:

- 4-OSP-23.1 Diesel Generator Operability Test.
- 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable

## General References:

- 4-OSP-23.1 Diesel Generator Operability Test.
- 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable

Initiating Cue:

- You are the Admin RO and you have been directed to continue with preparations for the monthly test of the Unit 4 B Diesel Generator using 4-OSP-23.1 Diesel Generator Operability Test starting at step 7.2.2.

Time Critical Task: Yes

Validation Time: 15 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**

SIMULATOR SETUPReset to IC #N/A



*Denote critical steps with a check mark(✓)*

		Start Time
STEP 1 :	Obtain a copy of 4-OSP-23.1 Diesel Generator Operability Test (From initiating cue.)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Copy of 4-OSP-23.1 Diesel Generator Operability Test is obtained.	
<u>Cue</u>	When the examinee goes to obtain a copy of the procedure, provide a marked up copy of 4-OSP-23.1 Diesel Generator Operability Test, section 7.2.2 pages 39 and 40.	
<u>Comment</u>		
<b>NOTE:</b>	4-OSP-023.1 procedure caution: 4B EDG is inoperable when parallel to the grid and during the starting air isolation and engine barring checks. A Train ESF equipment is required to be operable prior to testing 4B EDG.	
<b>NOTE:</b>	4-OSP-023.1 procedure note: Steps annotated with an asterisk are duplicated by 4-OP-023, Emergency Diesel Generator and 4-OSP-023.2, Diesel Generator 24-Hour Full Load Test and Load Rejection. At the discretion of the Shift Manager, these steps may be marked N/A if they have been completed.	

STEP 2 :	Perform 0-OSP-023.3, EQUIPMENT OPERABILITY VERIFICATION WITH AN EMERGENCY DIESEL GENERATOR INOPERABLE.  (4-OSP-23.1 Step 7.2.2.1)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Copy of 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable is obtained.	
<u>Cue</u>	When the examinee goes to obtain a copy of the procedure, provide a copy of 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable, section 6.4.	
<u>Comment</u>		
<b>NOTE:</b>	Unit 3 and 4 are in Mode 1, The LCO for Unit 4 requires both EDG's OPERABLE AND one Unit 3 EDG. to be OPERABLE. The OPERABILITY check of both startup transformers is required to comply with LCO 3.8.1.1.b.2 Action b.	

STEP 3 :	Verify the operability of 2 Startup Transformers AND their associated circuits by performing Attachment 9, within 1 hour and 8 hour thereafter.  (0-OSP-23.3 Step 6.4.1)	SAT _____ UNSAT _____
<u>Standard:</u>	The examinee completes 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable Attachment 9, within 1 hour.	
<u>Cue</u>	When the examinee goes to obtain a copy of the procedure, provide a copy of 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable, Attachment 9 UNIT 3 AND 4 STARTUP TRANSFORMER OPERABILITY VERIFICATION.	
<u>Comment</u>		
<b>NOTE:</b>	0-OSP-023.3 procedure note:  If Unit 4 is in Modes 1 through 4, the LCO action statement time entered in the EOOS book shall not exceed 72 hours until Fire Protection requirements are met using 4-OP-023, Emergency Diesel Generator.  Steps 6.4.1 through 6.4.3 are applicable since the 4B EDG is one of the four required EDGs for dual unit operation (both units are in Modes 1 through 4).	
<b>NOTE:</b>	0-OSP-023.3 procedure caution:  Step 6.4.1 is required to be performed within 1 hour and at least once per 8 hours thereafter (see Subsection 4.2).  (The one hour checks are the only portion of the surveillance that will be evaluated in this JPM)	

STEP 4 : ✓	Verify startup transformer breaker 3AA05 4 KV Bus 3A Feed From U/3 Startup Xfmr is RACKED IN.  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes 3AA05 4 KV Bus 3A Feed From U/3 Startup Xfmr is RACKED IN by checking the green lights above the breaker handswitch ON.	
<u>Comment</u>		
<b>NOTE:</b>	3AA05 4 KV Bus 3A Feed From U/3 Startup Xfmr control switch is located on the Unit 3 console far right side.	
<b>NOTE:</b>	** During Unit startup, shutdown, OR after a unit trip, 3AA05 AND 3AB05 may be in the CLOSED position. With both units in Mode 5 or 6, a minimum of one of these breakers shall be in the CLOSED position. IF 4AA22 is CLOSED, THEN 3AA05 shall be verified to be OPEN.	

STEP 5 : ✓	Verify startup transformer breaker 3AB05 4 KV Bus 3B Feed From U/3 Startup Xfmr is RACKED IN.  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes 3AB05 4 KV Bus 3B Feed From U/3 Startup Xfmr is RACKED IN by checking the green lights above the breaker handswitch ON.	
<u>Comment</u>		
<b>NOTE:</b>	3AB05 4 KV Bus 3B Feed From U/3 Startup Xfmr control switch is located on the Unit 3 console far right side.	

STEP 6 ✓	Verify startup transformer breaker 3AA22 4 KV Bus 3A Feed From U/4 Startup Xfmr is RACKED OUT  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes 3AA22 4 KV Bus 3A Feed From U/4 Startup Xfmr is RACKED OUT by checking the breaker indicating lights above the breaker handswitch OFF.	
<u>Comment</u>		
<b>NOTE:</b>	3AA22 4 KV Bus 3A Feed From U/4 Startup Xfmr control switch is located on the Unit 3 console far right side.	
<b>NOTE:</b>	The current operating practice for checking the breaker status for this surveillance is to perform a visual check of the indicating lights in the control room. The actual local verification of this breaker being RACKED OUT is performed in the weekly power sources verification check.	

STEP 7 ✓	Verify startup transformer breaker 4AA05 4 KV Bus 4A Feed From U/4 Startup Xfmr is RACKED IN  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes 4AA05 4 KV Bus 4A Feed From U/4 Startup Xfmr is RACKED IN by checking the green lights above the breaker handswitch ON.	
<u>Comment</u>		
<b>NOTE:</b>	4AA05 4 KV Bus 4A Feed From U/4 Startup Xfmr control switch is located on the Unit 4 console far right side.	

STEP 8 : ✓	Verify startup transformer breaker 4AB05 4 KV Bus 4B Feed From U/4 Startup Xfmr is RACKED IN.  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes 4AB05 4 KV Bus 4B Feed From U/3 Startup Xfmr is RACKED IN by checking the green lights above the breaker handswitch ON.	
<u>Comment</u>		
<b>NOTE:</b>	4AB05 4 KV Bus 4B Feed From U/4 Startup Xfmr control switch is located on the Unit 4 console far right side.	

STEP 9 : ✓	Verify startup transformer breaker 4AA22 4 KV Bus 4A Feed From U/3 Startup Xfmr is RACKED OUT  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes 3AA22 4 KV Bus 4A Feed From U/3 Startup Xfmr is RACKED OUT by checking the breaker indicating lights above the breaker handswitch OFF.	
<u>Comment</u>		
<b>NOTE:</b>	4AA22 4 KV Bus 4A Feed From U/3 Startup Xfmr control switch is located on the Unit 4 console far right side.	
<b>NOTE:</b>	The current operating practice for checking the breaker status for this surveillance is to perform a visual check of the indicating lights in the control room. The actual local verification of this breaker being RACKED OUT is performed in the weekly power sources verification check.	
<b>NOTE:</b>	** During Unit startup, shutdown, OR after a unit trip, 3AA05 AND 3AB05 may be in the CLOSED position. With both units in Mode 5 or 6, a minimum of one of these breakers shall be in the CLOSED position. IF 4AA22 is CLOSED, THEN 3AA05 shall be verified to be OPEN.	

STEP 10 ✓	Verify that the Unit 3 Startup Transformer voltage potential lamp on Unit 3 VPA is lit.  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes Unit 3 Startup Transformer voltage potential lamp on Unit 3 VPA is lit by checking the white light indication ON.	
<u>Comment</u>		
<b>NOTE:</b>	Both the Unit 3 and Unit 4 Startup Transformer voltage potential lamps are located on the Unit 3 Vertical Panel A (VPA) far right side.	

STEP 11 ✓	Verify that the Unit 4 Startup Transformer voltage potential lamp on Unit 3 VPA is lit.  (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee observes Unit 4 Startup Transformer voltage potential lamp on Unit 3 VPA is lit by checking the white light indication ON.	
<u>Comment</u>		
<b>NOTE:</b>	Both the Unit 3 and Unit 4 Startup Transformer voltage potential lamps are located on the Unit 3 Vertical Panel A (VPA) far right side.	

STEP 12 : ✓	Acceptance Criteria is verified MET (0-OSP-23.3 Attachment 9)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee determines Acceptance Criteria is satisfactory by virtue of all Breakers correctly aligned AND the Startup Transformer voltage potential lamps are lit indicating power availability	
<u>Comment</u>		
<b>Terminating Cue:</b>	<b>The task is complete when the Examinee completes 0-OSP-023.3, Equipment Operability Verification With An Emergency Diesel Generator Inoperable Attachment 9.</b>	<b>STOP</b>

Stop Time \_\_\_\_\_



**Verification of Completion**Job Performance Measure No. R.A.2

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_

## ***JPM BRIEFING SHEET***

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

### **INITIAL CONDITIONS:**

- Unit 3 and 4 are both in Mode 1
- Preparations are in progress to perform a monthly test of the Unit 4 B Diesel Generator using 4-OSP-23.1 Diesel Generator Operability Test section 7.2.
- Step 7.2.1 of 4-OSP-23.1 Diesel Generator Operability Test is complete.

### **INITIATING CUE:**

- You are the Admin RO and you have been directed to continue with preparations for the monthly test of the Unit 4 B Diesel Generator using 4-OSP-23.1 Diesel Generator Operability Test starting at step 7.2.2.

**Acknowledge to the examiner when you are ready to begin.**

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.**

Facility: Turkey Point Task No: 02049004300  
Task Title: Determine Required Actions for Instrumentation Failure JPM No: S.A.2  
K/A Reference: 2.2.22 SRO 4.7  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance X Actual Performance \_\_\_\_\_  
Classroom X Simulator \_\_\_\_\_ Plant \_\_\_\_\_

**Read to the examinee:**

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

## Initial Conditions:

- Unit 4 is in Mode 1, 100% power.
- Pressure transmitter PT-4-475 Steam Generator A Pressure has failed.
- Actions to stabilize Unit 4 have taken place.
- 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels is in progress at step 5.4

## Task Standard:

- The bistables required by Technical Specifications to be bypassed have been identified.

## Required Materials:

- 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels

## General References:

- 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels
- Technical Specifications TURKEY POINT - UNITS 3 & 4

Initiating Cue:

- You are the Unit 4 Unit Supervisor. Using 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels, complete the required action starting at step 5.5 to maintain compliance with Unit 4 Technical Specifications.

Time Critical Task: No

Validation Time: 15 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**

SIMULATOR SETUPReset to IC #N/A

*Denote critical steps with a check mark(✓)*

Start Time \_\_\_\_\_

STEP 1 :	Obtain a copy of 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels.  (From the initiating cue.)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Copy of 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels is obtained.	
<u>Cue</u>	Provide a copy of 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels	
<u>Comment</u>		
STEP 2 : ✓	Refer to Unit 4 Technical Specifications (4-ONOP-049.1 step 5.5.1)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Examinee refers to Unit 4 Technical Specifications and correctly identifies bistables are required to be tripped for both the following LCOs.  LCO 3.3.1 Functional Unit 12, Action 6  AND  LCO 3.3.2 Functional Unit 1E and 4D, Action 15	
<u>Cue</u>	Provide a copy of Technical Specifications Sections 3/4 3.1 REACTOR TRIP SYSTEM INSTRUMENTATION and 3/4 3.2 ENGINEERED SAFETY FEATURES ACTUATION SYSTEM INSTRUMENTATION.	
<u>Comment</u>		
<b>NOTE:</b>	Procedure Caution  The failed channel bistables is required to be placed in the tripped mode within six (6) hours of the failure determination.	

<b>STEP 3</b> ✓	Determine bistables that are required to be tripped for the instrument malfunction (4-ONOP-049.1 step 5.11.1.1 and Attachment 4)	SAT _____ UNSAT _____
<u>Standard:</u>	Examinee determines the following bistables are required to be placed in TRIP: <b>P-4-475 Steam Generator A Pressure</b> BS-4-474 Safeguards Logic <b>AND</b> BS-4-475 HI Steam Line ΔP SI <b>AND</b> BS-4-478B-1 FW to SF Mismatch Logic	
<u>Comment</u>		
<b>NOTE:</b>	Procedure NOTE Steam generator steam flow channel F-4-474 shall also be placed in the tripped condition due to loss of pressure compensation. Additionally, 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels places bistables for associated alarm functions to be placed in TRIP. These bistables are: BS-4-478B-2 SF>FW Alarm BS-4-478C FW>SF Alarm The examinee may identify these bistables to be placed in TRIP, however, they are NOT required to be TRIPPED in order to comply with Technical Specifications.	
<b>Terminating Cue:</b>	<b>The task is complete when the Examinee determines the required bistables that need to be tripped to comply with LCO 3.3.1 Action 6 AND LCO 3.3.2 Action 15</b>	<b>STOP</b>

Stop Time \_\_\_\_\_

**Verification of Completion**Job Performance Measure No. S.A.2

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_



## **JPM BRIEFING SHEET**

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

### **INITIAL CONDITIONS:**

- Unit 4 is in Mode 1, 50% power.
- Pressure transmitter PT-4-475 Steam Generator A Pressure has failed.
- Actions to stabilize Unit 4 have taken place
- 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels is in progress at step 5.4

### **INITIATING CUE:**

- You are the Unit 4 Unit Supervisor. Using 4-ONOP-049.1, Deviation or Failure of Safety Related or Reactor Protection Channels, complete the required action starting at step 5.5 to maintain compliance with Unit 4 Technical Specifications.

**Acknowledge to the examiner when you are ready to begin.**

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.**

Facility: Turkey Point Task No: 02203001100  
Determine Allowable Stay  
Time & Determine  
Task Title: Radiological Requirements JPM No: A.3  
K/A Reference: 2.3.7 RO 3.5 SRO 3.6  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance X Actual Performance \_\_\_\_\_  
Classroom X Simulator \_\_\_\_\_ Plant \_\_\_\_\_

**Read to the examinee:**

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

## Initial Conditions:

- Unit 3 is in MODE 5, making preparations for MODE 4 entry.
- Clearance restoration from work on the Letdown piping in the Unit 3 Pipe and Valve Room is in progress.
- The work involved to remove the clearance will require kneeling and crawling to remove clearance tags.
- You are holding a pre-job brief with the Primary Operator and are discussing RWP requirements and ALARA concerns prior to commencing the clearance restoration.

## Task Standard:

- All questions from the initial conditions are answered correctly.

## Required Materials:

- Radiation Work Permit 08-005, "Radiological Controlled Area, Operations Department, Plant Operations"
- PTN Unit 3 Pipe and Valve Room Monthly Survey Map, Log # 08-5743
- PTN Unit 4 Pipe and Valve Room Monthly Survey Map, Log # 08-5795

## General References:

- 0-HPS-025.1, "General Posting Requirements for Radiological Hazards"
- 0-ADM-600, "Radiation Protection Manual"
- 0-ADM-604, "Radiological Protection Guidelines and Practices"
- 0-HPS-020, "Radiation Surveys"
- 0-HPS-021, "Surface Contamination Surveys"
- 0-HPA-073 Hot Spot Tracking and Reduction Program

Initiating Cue:

Using the initial conditions and required references determine the following:

- What is the maximum allowable dose allowed by the RWP?
- What is the maximum stay time based on the highest general area radiation in the room?
- What is the minimum requirement for protective clothing?
- What is the minimum required dosimetry required for entry into the area?
- What is the area of highest surface contamination in the room?
- Where is (are) the location of any hot spot(s) in the room?
- Where is the lowest dose location in the room where the operator should stand in the event that he/she is required to wait there?

Time Critical Task: No

Validation Time: 20 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**

SIMULATOR SETUP

Reset to IC #

N/A

*Denote critical steps with a check mark(✓)*

		Start Time
STEP 1 :	Obtain a copy of Radiation Work Permit 08-005, "Radiological Controlled Area, Operations Department, Plant Operations" and PTN Unit 3 Pipe and Valve Room Monthly Survey Map, Log # 08-5743	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Copy of the RWP and Survey Map are obtained.	
<u>Cue</u>	Provide a copy of the following: <ul style="list-style-type: none"> <li>• Radiation Work Permit 08-005, "Radiological Controlled Area, Operations Department, Plant Operations"</li> <li>• PTN Unit 3 Pipe and Valve Room Monthly Survey Map, Log # 08-5743</li> <li>• PTN Unit 4 Pipe and Valve Room Monthly Survey Map, Log # 08-5795</li> </ul>	
<u>Comment</u>		
<b>NOTE:</b>	Both the Unit 3 and Unit 4 Survey Maps are provided, the examinee needs to differentiate between the survey maps to get the correct results.	
STEP 2 ✓	What is the maximum allowable dose allowed by the RWP?	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	The examinee determines the maximum dose allowed by RWP 08-005 is 25 mrem	
<u>Comment</u>		
<b>NOTE:</b>	ALL correct answers are provided on the JPM ANSWER SHEET	

STEP 3 ✓	What is the maximum stay time based on the highest general area radiation in the room?	SAT ____ UNSAT ____
<u>Standard:</u>	The examinee determines the maximum stay time is 2.5 hours by interpreting the RWP 08-005 requirements and the Unit 3 Pipe and Valve Room survey map data.	
<u>Comment</u>		
<b>NOTE:</b>	<p>The maximum stay time allowed under this RWP (based on Unit 3 Pipe and Valve Room highest general area dose rates is 50 min)</p> <p>25 mrem (from RWP 08-005 maximum dose/ 10 mrem/hr (from the highest general area dose rate in the Unit 3 Pipe and Valve Room</p> <p>25 mrem divided by 10mrem per hour = 2.5 hr.</p>	

STEP 4 ✓	What is the minimum requirement for protective clothing.	SAT ____ UNSAT ____
<u>Standard:</u>	The examinee determines a set of full protective clothing is required by interpreting the RWP 08-005 Note 1 requirements with the initial conditions given.	
<u>Comment</u>		
<b>NOTE:</b>	RWP 08-005 special instruction #1 requires a full set of protective clothing for any work done while kneeling or crawling in a Contaminated Area.	

STEP 5 ✓	What is the minimum required dosimetry required for entry into the area?	<input checked="" type="checkbox"/> SAT <input type="checkbox"/> UNSAT
Standard:	The examinee determines the following dosimetry is required by interpreting the RWP 08-005 and the Unit 3 Pipe and Valve Room survey map:  TLD  <b>AND</b>  PAM or PEA	
Comment		
NOTE:	RWP 08-005 specifies that Operators are required to wear a PAM or PEA while entry into the RCA	

STEP 6 ✓	What is the area of highest surface contamination in the room?	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
Standard:	The examinee determines 1594 dpm/100 cm <sup>2</sup> by interpreting the Unit 3 Pipe and Valve Room survey map data.	
Comment		
NOTE:	As found on PTN Unit 3 Pipe and Valve Room Monthly Survey Map, Log # 08-5743 swipe # 18.	

STEP 7 : ✓	Where is (are) the location of any hot spot(s) in the room?	SAT ____ UNSAT ____
<u>Standard:</u>	The examinee determines there is one hot spot in the Unit 3 Pipe and Valve Room, between the Letdown pipe and the Contaminated Area boundary by interpreting the Unit 3 Pipe and Valve Room survey map data.	
<u>Comment</u>		
STEP 8 : ✓	Where is the lowest dose location in the Contaminated Area where the operator should stand in the event that he/she is required to wait there?	____ SAT ____ UNSAT
<u>Standard:</u>	The examinee determines the lowest dose area in the Unit 3 Pipe and Valve Room is near the Contaminated Area boundary lower left area of the survey map by interpreting the Unit 3 Pipe and Valve Room survey map data.	
<u>Comment</u>		
<b>Terminating Cue:</b>	<b>The task is complete when the Examinee returns the cue sheet to the examiner.</b>	<b>STOP</b>

Stop Time \_\_\_\_\_



**JPM ANSWER KEY**

1. What is the maximum allowable dose allowed by the RWP?

**ANSWER:** The maximum dose allowed by RWP 08-005 is 25 mrem.

2. What is the maximum stay time based on the highest general area radiation in the room?

**ANSWER:** The maximum stay time allowed under this RWP (based on Unit 3 Pipe and Valve Room general area dose) =  $(25 \text{ mrem} / 10 \text{ mrem/hr}) = 2.5 \text{ hr}$

**BASES:** 25 mrem is the dose at which the DAD alarm is set per RWP 08-0005.

30 mrem/hr is the highest general area radiation dose shown on the Unit 3 Pipe and Valve Room survey map in the vicinity of Letdown piping.

3. What is the minimum requirement for protective clothing?

**ANSWER:** A full protective clothing is required per RWP 08-005 special instruction #1

4. What is the minimum required dosimetry required for entry into the area?

**ANSWER:** The following dosimetry is required:

- TLD
- PAM or PEA

5. What is the area of highest surface contamination in the room?

**ANSWER:** From the survey map, swipe #18 has the highest surface contamination in Unit 3 Pipe and Valve Room (1594 dpm/100 cm<sup>2</sup>).

6. Where is (are) the location of any hot spot(s) in the room?

**ANSWER:** There is one hot spot in the Unit 3 Pipe and Valve Room, between the Letdown pipe and the Contaminated Area boundary.

7. Where is the lowest dose location in the Contaminated Area where the operator should stand in the event that he/she is required to wait there?

**ANSWER:** The lowest dose area in the Unit 3 Pipe and Valve Room is near the Contaminated Area boundary lower left area of the survey map.

**BASIS:** From the survey map, the lowest general area dose in the Unit 3 Pipe and Valve Room is 1 mR/hr which is in the far SE corner of the room (bottom left on the survey map). To minimize dose while waiting, one should wait in the lowest dose area in the room.

**Verification of Completion**Job Performance Measure No. A.3

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_

## **JPM BRIEFING SHEET**

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

### **INITIAL CONDITIONS:**

- Unit 3 is in MODE 5, making preparations for MODE 4 entry.
- Clearance restoration from work on the Letdown piping in the Unit 3 Pipe and Valve Room is in progress.
- The work involved to remove the clearance will require kneeling and crawling to remove clearance tags.
- You are holding a pre-job brief with the Primary Operator and are discussing RWP requirements and ALARA concerns prior to commencing the clearance restoration.

### **INITIATING CUE:**

Using the initial conditions and required references determine the following:

1. What is the maximum allowable dose allowed by the RWP?
2. What is the maximum stay time based on the highest general area radiation in the room?
3. What is the minimum requirement for protective clothing?
4. What is the minimum required dosimetry required for entry into the area?
5. What is the area of highest surface contamination in the room?
6. Where is (are) the location of any hot spot(s) in the room?
7. Where is the lowest dose location in the Contaminated Area where the operator should stand in the event that he/she is required to wait there?

**Acknowledge to the examiner when you are ready to begin.**

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY ANSWERED ALL THE QUESTIONS.**

Facility: Turkey Point Task No: 1001013400  
Task Title: Complete a State Notification Form JPM No: R.A.4  
K/A Reference: 2.4.39 RO 3.9  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance X Actual Performance \_\_\_\_\_  
Classroom X Simulator \_\_\_\_\_ Plant \_\_\_\_\_

**Read to the examinee:**

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

## Initial Conditions:

- The SIMULATOR is in Mode 3, an Emergency Plan Drill is in progress.
- The Reactor tripped due to a LOCA in the Containment
- The Emergency Coordinator declared a GENERAL EMERGENCY at TODAY at time 1200
- The reason for the GENERAL EMERGENCY was a Large Break LOCA, EAL number 1D
- Severe core damage has occurred.
- Wind direction is from 120
- Wind speed is 10 mph
- No radioactive release is in progress.
- Protective Action Recommendations are as follows:

0-2 miles **Evacuate ALL** sectors

2-5 miles **Evacuate (Sectors Affected). Shelter ALL REMAINING** sectors

5-10 miles **Shelter ALL** Sectors

## Task Standard:

- The Florida Nuclear Plant Emergency Notification Form is completed in accordance 0-EPIP-20134 Offsite Notifications and Protective Action Recommendations, with NO errors on items identified with a \*.

## Required Materials:

- 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations
- FLORIDA NUCLEAR PLANT EMERGENCY NOTIFICATION FORM

## General References:

- 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations
- FLORIDA NUCLEAR PLANT EMERGENCY NOTIFICATION FORM

## Initiating Cue:

- You are the Shift Communicator, given the initial conditions, complete the Florida Nuclear Plant Emergency Notification Form and hand it to the examiner when you are complete.
- There is an element of this task that is time critical.

Time Critical Task: Yes

Validation Time: 15 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**

SIMULATOR SETUPReset to IC #

N/A

*Denote critical steps with a check mark(✓)*

		Start Time
STEP 1 :	Obtain a Florida Nuclear Plant Emergency Notification Form. (From initiating cue.)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	A Florida Nuclear Plant Emergency Notification Form is obtained.	
<u>Cue</u>	Provide a copy of a Florida Nuclear Plant Emergency Notification Form F-439 and O-EPIP- 20134, Offsite Notifications and Protective Action Recommendations Attachments 1B and 1C.	
<u>Comment</u>		

<b>STEP 2 :</b> ✓	Complete Florida Nuclear Plant Emergency Notification Form. (0-EPIP- 20134, Attachment 1B) (Turkey Point Nuclear Form F 439)	_____ SAT _____ UNSAT
<u>Standard:</u>	The examinee completes a Florida Nuclear Plant Emergency Notification Form is with no errors noted on items annotated by a * within 15 minutes.	
<u>Comment</u>		
<b>NOTE:</b>	Step by step instructions for completing the Florida Nuclear Plant Emergency Notification Form are contained within 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations, Attachment 1B.	
<b>NOTE:</b>	The time critical element is complete when the State Notification Form is complete.	
<b>NOTE:</b>	See the exam key for a copy of the completed State Notification Form	
<b>Terminating Cue:</b>	<b>The task is complete when the Examinee returns the State Notification Form to the examiner.</b>	<b>STOP</b>

Stop Time \_\_\_\_\_



**Verification of Completion**Job Performance Measure No. R.A.4

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_

## **JPM BRIEFING SHEET**

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

### INITIAL CONDITIONS:

- The **SIMULATOR** is in Mode 3, an Emergency Plan Drill is in progress.
- The Reactor tripped due to a LOCA in the Containment
- The Emergency Coordinator declared a GENERAL EMERGENCY at TODAY at time 1200
- The reason for the GENERAL EMERGENCY was a Large Break LOCA, EAL number 1D
- Severe core damage has occurred.
- Wind direction is from 120
- Wind speed is 10 mph
- No radioactive release is in progress.
- Protective Action Recommendations are as follows:

0-2 miles **Evacuate ALL** sectors

2-5 miles **Evacuate (Sectors Affected). Shelter ALL REMAINING** sectors

5-10 miles **Shelter ALL** Sectors

### INITIATING CUE:

- You are the Shift Communicator, given the initial conditions, complete the Florida Nuclear Plant Emergency Notification Form and hand it to the examiner when you are complete.
- There is an element of this task that is time critical.

**Acknowledge to the examiner when you are ready to begin.**

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE SATISFACTORILY COMPLETED THE ASSIGNED TASK.**

Facility: Turkey Point Task No: 01001013400  
Task Title: Classify the Event and Issue JPM No: S.A.4  
PARs  
K/A Reference: 2.4.41 SRO 4.6  
Examinee: \_\_\_\_\_ NRC Examiner: \_\_\_\_\_  
Facility Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_  
Method of testing: \_\_\_\_\_  
Simulated Performance X Actual Performance \_\_\_\_\_  
Classroom X Simulator \_\_\_\_\_ Plant \_\_\_\_\_

**Read to the examinee:**

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

## Initial Conditions:

- The Simulator is in Mode 3
- The Reactor tripped due to a LOCA in the Containment
- The Unit Supervisor is transitioning to 3-EOP-E-1, Loss of Reactor or Secondary Coolant.
- Sump Levels are responding as anticipated.
- RCS Pressure is 1300 psig.
- Both Trains of Safety Injection have actuated.
- HHSI flow is 300 gpm
- Containment Pressure is 25 psig and rising slowly
- Both Trains of Containment Spray have actuated and are providing flow.
- Adverse conditions exist in the Containment
- No radioactive release is in progress.
- Wind speed is 10 mph
- Wind direction is from 120

## Task Standard:

- Classification of General Emergency, EAL Number 1D is declared within 15 minutes of starting the task.
- A Standard General Emergency Protective Action Recommendation (PAR) is made within 15 minutes of declaration of the event.

## Required Materials:

- 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR
- 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations

## General References:

- 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR
- 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations

Initiating Cue:

- You are the Emergency Coordinator, given the existing conditions in the simulator, classify the event using 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR and issue protective action recommendations using 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations.
- There is an element of this task that is Time Critical.

Time Critical Task: Yes

Validation Time: 20 minutes

**HAND JPM BRIEFING SHEET TO EXAMINEE AT THIS TIME!**

SIMULATOR SETUPReset to IC #

N/A

*Denote critical steps with a check mark(✓)*

Start Time \_\_\_\_\_

STEP 1 :	Obtain 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR. (From the initiating cue.)	_____ SAT _____ UNSAT
<u>Standard:</u>	0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR is obtained.	
<u>Cue</u>	Provide a copy of 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR, Enclosure 1 Emergency Classification Table.	
<u>Comment</u>		

STEP 2 :	Review 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR. (0-EPIP-20101, Enclosure 1)	_____ SAT _____ UNSAT
<u>Standard:</u>	Examinee reviews 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR Enclosure 1, for the event depicted in the initial conditions sheet.	
<u>Comment</u>		

<b>STEP 3</b> ✓	Classify Off-Normal Event using present available information, AND declare the emergency classification using Enclosure 1. (0-EPIP-20101, Enclosure 1)	SAT _____ UNSAT _____
<u>Standard:</u>	The examinee classifies the event as a General Emergency, EAL Number <b>1D</b> by interpreting the information given in the initial conditions within 15 minutes of starting the JPM.	
<u>Comment</u>		
<b>NOTE:</b>	Procedure Caution; CAUTION : Consult 0- EPIP- 20134, Attachment 3, for required Protective Action Recommendation	
<b>NOTE:</b>	The GE Classification is based on the following: EAL number 1D <ul style="list-style-type: none"> <li>RCS Leakage greater than 50 gpm is given in the initial conditions as a LOCA with High Head Safety Injection flow of 300 gpm.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>RCS Leakage greater than available charging pump capacity is given in the initial conditions as a LOCA with High Head Safety Injection flow of 300 gpm.</li> </ul> <b>AND</b> <ul style="list-style-type: none"> <li>Containment Pressure in excess of 20 psig is given in the initial conditions.</li> </ul>	
<b>NOTE:</b>	Annotate the stop time for the event classification here. _____	
<b>NOTE:</b>	Examinee continues with the task to issue Protective Action Recommendations using 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations. The critical time element continues.	
<b>NOTE:</b>	Annotate the start time for the Protective Action Recommendations here. _____	

STEP 4 :	Obtain 0-EPIP-20134, Offsite Notifications and Protective Action Recommendations.	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	0-EPIP-20134, Offsite Notifications and Protective Action Recommendations or equivalent is obtained.	
<u>Cue</u>	Provide a copy of form F-444, Offsite Notifications and Protective Action Recommendations, and form F-439 page 2	
<u>Comment</u>		

STEP 5 :	Review 0-EPIP-20134, Offsite Notifications and Protective Action Recommendations.  (0-EPIP-20134, Attachment 3, form F-444)	<input type="checkbox"/> SAT <input type="checkbox"/> UNSAT
<u>Standard:</u>	Examinee reviews 0-EPIP-20134, or equivalent form F-444, Offsite Notifications and Protective Action Recommendations	
<u>Comment</u>		



STEP 6 : ✓	Issue Protective Action Recommendations. (0-EPIP-20134, Attachment 3 Note 1)	SAT _____ UNSAT _____
<u>Standard:</u>	Examinee determines the following Protective Action Recommendations for Actual or Projected Core Damage by interpreting the information given in the initial conditions within 15 minutes of starting the JPM:  0-2 miles <b>SHELTER ALL</b> sectors  2-5 miles <b>SHELTER Sectors N, P &amp; Q.</b>  5-10 miles <b>NO ACTION.</b>	
<u>Comment</u>		
<b>NOTE:</b>	Protective Action Recommendations are based on the Standard General Emergency Protective Action Recommendations as depicted in the initial conditions:  <ul style="list-style-type: none"> <li>• LOCA without Severe Core Damage.</li> <li>• No Loss of Physical Control of the plant has occurred.</li> </ul>	
<b>NOTE:</b>	The time critical element is complete when the protective action recommendations are made.	
<b>Terminating Cue:</b>	<b>The task is complete when the Examinee returns the cue sheet to the examiner.</b>	<b>STOP</b>

Stop Time \_\_\_\_\_

**Verification of Completion**

Job Performance Measure No. S.A.4

Examinee's Name: \_\_\_\_\_

Examiner's Name: \_\_\_\_\_

Date Performed: \_\_\_\_\_

Facility Evaluator: \_\_\_\_\_

Number of Attempts: \_\_\_\_\_

Time to Complete: \_\_\_\_\_

Question Documentation:

Question: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Response: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Result: Satisfactory/Unsatisfactory

Examiner's signature and date: \_\_\_\_\_

## **JPM BRIEFING SHEET**

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

### **INITIAL CONDITIONS:**

- The Simulator is in Mode 3
- The Reactor tripped due to a LOCA in the Containment
- The Unit Supervisor is transitioning to 3-EOP-E-1, Loss of Reactor or Secondary Coolant.
- Sump Levels are responding as anticipated.
- RCS Pressure is 1300 psig.
- Both Trains of Safety Injection have actuated.
- HHSI flow is 300 gpm
- Containment Pressure is 25 psig and rising slowly
- Both Trains of Containment Spray have actuated and are providing flow.
- Adverse conditions exist in the Containment
- No radioactive release is in progress.
- Wind speed is 10 mph
- Wind direction is from 120

### **INITIATING CUE:**

- You are the Emergency Coordinator, given the existing conditions in the simulator, classify the event using 0-EPIP-20101, DUTIES OF EMERGENCY COORDINATOR and issue protective action recommendations using 0-EPIP- 20134, Offsite Notifications and Protective Action Recommendations.
- There is an element of this task that is Time Critical.

**Acknowledge to the examiner when you are ready to begin.**

**HAND THIS PAPER BACK TO YOUR EVALUATOR WHEN YOU HAVE  
SATISFACTORILY COMPLETED THE ASSIGNED TASK.**