

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: ADMNRC-10RO
Title: Perform personnel frisk upon exiting Surface Contamination Area (SCA)

Examinee:

Evaluator:

	Print	Signature	Date
Results:	Sat	Unsat	Total Time: minutes
Comments:	Perform while in RCA		

References: RP1.ID9, Radiation Work Permits, Attachment 9.1, Rev. 2;
RCP D-911, Operation of Eberline Count Rate Meters, Rev. 3;
RCP D-600, Personnel Decontamination and Evaluation, Rev. 16

Alternate Path: Yes No
Time Critical: Yes No
Time Allotment: 10 Minutes
Critical Steps: 1, 2, 3, 4
Job Designation: RO
Task Number: G2.3.4
Rating: 2.5

AUTHOR:	_____ DAVE BURNS	DATE:	_____ 02/03/2000
REVIEWED BY:	_____ N/A JPM COORDINATOR	DATE:	_____ N/A
APPROVED BY:	_____ N/A TRAINING LEADER	DATE:	_____ N/A

REV. 1

- Directions:** **No plant controls or equipment are to be operated during the performance of this Job Performance Measure.** All actions taken by the examinee should be clearly demonstrated and verbalized to the evaluator. The student will be given the initial conditions, initiating cue, and task standard. The examiner will then ask if any clarifications are needed. The examinee may be given the procedure and told the step with which to begin.
- Required Materials:** RM-14 or RM-3C-4 personnel frisker
- Initial Conditions:** You have just performed adjustment on the Unit 1 Spent Fuel Pool Skimmer suction. You are exiting the Surface Contaminated Area (SCA) to check the Spent Fuel Pool Skimmer Pump Suction pressure on the 100' elevation of the Fuel Handling Building.
- Initiating Cue:** You are to perform a personnel frisk in accordance with the instructions from the step off pad in accordance with RP1.ID9
- Task Standard:** Personnel frisk performed in accordance with RP1.ID9 and step off pad instructions.

Start Time:

Step

Expected Operator Actions

1. **Operator reads local instructions from the step off pad.
-

1.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator locates step off pad instructions.

1.2 Operator identifies the level of contamination inside of the area just exited.

Cue: The SCA is <10,000 dpm.

Step was: Sat: _____ Unsat _____*

1.3 2. **Operator operates detector per RCP D-911 & RCP D-600.

2.1

Operator verifies that power is available. (Either battery check or plugged in to 120VAC power supply.)

2.2 Operator verifies that the detector is in the X1 or X10 scale positions.

Note: The X1 or X10 scales may be used per RCP D-600.

2.3 Operator verifies background radiation is <300cpm.

Cue: Background radiation is at 130cpm.

Step was: Sat: _____ Unsat _____*

2.4

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Step

Expected Operator Actions

3. **Operator performs personnel frisk.

3.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator performs frisk of Hands.

3.2 Operator performs frisk of feet.

Cue: Red alarm light is lit and audible alarm is heard.

Step was: Sat: _____ Unsat _____*

3.3 4. **Operator contacts Radiation Protection.

4.1

Stop Time:

Total Time: (Enter total time on the cover page)

Operator contacts Access Senior.

Note: Operator does not need to actually contact the Access Senior, task complete when a phone is located and operator tells evaluator who he would be contacting.

Step was: Sat: _____ Unsat _____*

4.2

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

- Initial Conditions:** You have just performed adjustment on the Unit 1 Spent Fuel Pool Skimmer suction. You are exiting the Surface Contaminated Area (SCA) to check the Spent Fuel Pool Skimmer Pump Suction pressure on the 100' elevation of the Fuel Handling Building.
- Initiating Cue:** You are to perform a personnel frisk in accordance with the instructions from the step off pad in accordance with RP1.ID9
- Task Standard:** Personnel frisk performed in accordance with RP1.ID9 and step off pad instructions.

Number: ADMNRC-11SRO
Title: CLASSIFY AND RECOMMEND PARS BASED ON ACCIDENT CLASSIFICATION

Examinee:

Evaluator:

	Print	Signature	Date
Results:	Sat	Unsat	Total Time: minutes
Comments:			

References: EP G-1, Accident Classification and Emergency Plan Activation, Rev. 28

EP RB-10, Protective Action Recommendations, Rev. 6

Alternate Path: Yes No

Time Critical: Yes No

Time Allotment: 15 minutes

Critical Steps: 2, 3, 4, 5

Job Designation: SRO

Task Number: G2.4.44

Rating: 4.0

Directions: **No plant controls or equipment are to be operated during the performance of this Job Performance Measure.** All actions taken by the examinee should be clearly demonstrated and verbalized to the evaluator. The student will be given the initial conditions, initiating cue, and task standard. The examiner will then ask if any clarifications are needed. After identifying the appropriate procedure for the task, the examinee may be given the procedure and told the step with which to begin.

Required Materials: None

Initial Conditions: Unit 1 is in Mode 6. 15 minutes ago a Fuel Assembly was dropped in the Spent Fuel Pool this resulted in a release of radioactive material that remains in progress. The STA reports the following results from the most recent EP R-2 calculations:

Total Effective Dose Equivalent (TEDE) = 90 mrem

Thyroid Committed Dose Equivalent (TCDE) = 550 mrem

STA also reports that the current wind speed is 2.6 m/sec from 200°.

Initiating Cue: The Interim Site Emergency Coordinator directs you to Classify the event and complete Protective Action Recommendation Form 69-13216.

Task Standard: Event classified and Protective Action Recommendation Form 69-13216 is completed.

Start Time:

Step

Expected Operator Actions

1. Obtain the correct procedure.

1.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

Operator references G-1, Emergency
Classification and Emergency Plan
Activation.

Step was: Sat: _____ Unsat _____*

1.2 2. **Operator determines
correct classification.

2.1

Operator determines the classification to be
a Site Area Emergency. (
SAE # 3)

Step was: Sat: _____ Unsat _____*

2.2 3. ** Determines the nature of
the radiological release.

3.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

Operator references PAR form 69-13216 of
EP RB-10.

**Note: Provide candidate with exam
copy of PAR form 69-13216**

3.2 References step 5.

3.3 Checks "Ongoing Release" block.

Step was: Sat: _____ Unsat _____*

3.4

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

4. ** Determines MET tower data.

4.1

Operator references step 6.

4.2 Operator determines wind speed is 2.6 m/sec based on initial conditions.

4.3 Calculates wind speed in MPH (5.72 mph).

4.4 Operator determines wind direction is blowing from 200° based on initial conditions.

4.5 Checks Box J.

Step was: Sat: _____ Unsat _____*

4.6 5. ** Determine Protective Action Recommendation.

5.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

Operator references step 7.

5.2 Circles PAR recommendation "C"

5.3 Signs form completed by line.

Step was: Sat: _____ Unsat _____*

5.4

Stop Time: Total Time:

(Enter total time on the cover page)

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Initial Conditions: Unit 1 is in Mode 6. 15 minutes ago a Fuel Assembly was dropped in the Spent Fuel Pool this resulted in a release of radioactive material that remains in progress. The STA reports the following results from the most recent EP R-2 calculations:

Total Effective Dose Equivalent (TEDE) = 90 mrem

Thyroid Committed Dose Equivalent (TCDE) = 550 mrem

STA also reports that the current wind speed is 2.6 m/sec from 200°.

Initiating Cue: The Interim Site Emergency Coordinator directs you to Classify the event and complete Protective Action Recommendation Form 69-13216.

Task Standard: Event classified and Protective Action Recommendation Form 69-13216 is completed.

Number: ADMNRC-7RO
Title: DETERMINE ULTIMATE HEAT SINK TEMPERATURE

Examinee:

Evaluator:

	Print	Signature	Date
Results:	Sat	Unsat	Total Time: minutes
Comments:			

References: STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Rev. 78
Technical Specifications, DCPD Units 1 & 2

Alternate Path: Yes No

Time Critical: Yes No

Time Allotment: 10 Minutes

Critical Steps: 3

Job Designation: RO

Task Number: G2.1.23

Rating: 3.9

Directions: No plant controls or equipment are to be operated during the performance of this Job Performance Measure. All actions taken by the examinee should be clearly demonstrated and verbalized to the evaluator. The student will be given the initial conditions, initiating cue, and task standard. The examiner will then ask if any clarifications are needed. The examinee may be given the procedure and told the step with which to begin.

Required Materials: None

Initial Conditions: Unit 1 is at 50% power with CWP 1-2 out of service for replacement of damaged screens. Unit 2 is in day 14 of a refueling outage.

Current plant conditions for the Circ Water and ASW systems are as follows:

<u>Component</u>	<u>Status</u>	<u>Current Ocean Water Temperature</u>	
CWP 1-1	In-service	TI-311	61° F
CWP 1-2	Cleared	TI-328	61° F
ASW Pp 1-1	In-service to CCW HX 1-1	TI-1484	60.5° F
ASW Pp 1-2	In-STBY	TI-1485	60° F
CWP 2-1	Cleared	TI-311	61° F
CWP 2-1	Cleared	TI-328	61° F
ASW Pp 2-1	In-service to CCW HX 2-1	TI-1484	61° F
ASW Pp 2-2	Cleared	TI-1485	61° F

Initiating Cue: Shift Forman directs you to determine the Ultimate Heat Sink Temperature, using STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Step 39.

Task Standard: Ultimate Heat Sink temperature is determined based on given information and Shift Foreman informed of results.

Start Time:

Step

Expected Operator Actions

1. Operator obtains correct procedure

1.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator obtains STP I-1A, Attachment
11.1, Pages 10-12

**Cue: Provide candidate with exam copy
of STP I-1A, Attachment 11.1,
Pages 10-12**

Step was: Sat: _____ Unsat _____*

1.2 2. Operator determines UHS
temperature using method 1.

2.1

Records the Pacific Ocean water
temperatures for TI-311.

2.2 Determines that Method 1 is invalid
based on Notes 1 and 2, marks N/A
box and goes to Method 2.

**Note: Operator should refer to Notes 1
and 2, requires minimum of 2
indicators, since CWP 1-2 is not
running TI-328 is not valid.**

Step was: Sat: _____ Unsat _____*

2.3

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

3. ** Operator determines UHS temperature using method 2.

Records Pacific Ocean water temperatures, 60.5° F on TI-1484 on Unit 1 & 61° F on TI-1484 on Unit 2

3.1

3.2 Records the highest of the available indicators, 61° F.

Note: Unit 2 TI-1484 is reading highest at 61.0° F

3.3 Determines proper correction factor based on available indications of 0.3° F.

3.4 Determines corrected Pacific Ocean water temperature to be 61.3° F, initials step.

Step was: Sat: _____ Unsat _____*

3.5 4. Operator determines UHS temperature using method 3.

4.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator marks N/A box and goes to steps d & e.

Step was: Sat: _____ **Unsat** _____*

4.2 5. Informs Shift Foreman of results

5.1

Operator determines that corrected Pacific Ocean water temperature is satisfactory and marks boxes d & e N/A.

5.2 Operator informs Shift Foreman that corrected Pacific Ocean water temperature is satisfactory.

Step was: Sat: _____ **Unsat** _____*

5.3

Stop Time:

Total Time: (Enter total time on the cover page)

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Initial Conditions: Unit 1 is at 50% power with CWP 1-2 out of service for replacement of damaged screens. Unit 2 is in day 14 of a refueling outage.

Current plant conditions for the Circ Water and ASW systems are as follows:

<u>Component</u>	<u>Status</u>	<u>Current Ocean Water Temperature</u>	
CWP 1-1	In-service	TI-311	61° F
CWP 1-2	Cleared	TI-328	61° F
ASW Pp 1-1	In-service to CCW HX 1-1	TI-1484	60.5° F
ASW Pp 1-2	In-STBY	TI-1485	60° F
CWP 2-1	Cleared	TI-311	61° F
CWP 2-1	Cleared	TI-328	61° F
ASW Pp 2-1	In-service to CCW HX 2-1	TI-1484	61° F
ASW Pp 2-2	Cleared	TI-1485	61° F

Initiating Cue: Shift Forman directs you to determine the Ultimate Heat Sink Temperature, using STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Step 39.

Task Standard: Ultimate Heat Sink temperature is determined based on given information and Shift Foreman informed of results.

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: ADMNRC-7SRO
Title: VERIFY A DETERMINATION OF ULTIMATE HEAT SINK TEMPERATURE

Examinee:

Evaluator:

	Print	Signature	Date
Results:	Sat Unsat	Total Time:	minutes
Comments:			

References: STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Rev. 78

Technical Specifications, DCPD Units 1 & 2

Alternate Path: Yes No

Time Critical: Yes No

Time Allotment: 10 Minutes

Critical Steps: 3, 5, 6

Job Designation: SRO

Task Number: G2.1.23

Rating: 4.0

AUTHOR: _____ DAVE BURNS _____ DATE: _____ 2/15/2000 _____

REVIEWED BY: _____ N/A _____ DATE: _____ N/A _____
JPM COORDINATOR

APPROVED BY: _____ N/A _____ DATE: _____ N/A _____
TRAINING LEADER

REV. 0

Directions: **No plant controls or equipment are to be operated during the performance of this Job Performance Measure.** All actions taken by the examinee should be clearly demonstrated and verbalized to the evaluator. The student will be given the initial conditions, initiating cue, and task standard. The examiner will then ask if any clarifications are needed. The examinee may be given the procedure and told the step with which to begin.

Required Materials: None

Initial Conditions: Unit 1 is at 50% power with CWP 1-2 out of service for replacement of damaged screens. Unit 2 is in day 14 of a refueling outage.

Current plant conditions for the Circ Water and ASW systems are as follows:

<u>Component</u>	<u>Status</u>	<u>Current Ocean Water Temperature</u>	
CWP 1-1	In-service	TI-311	61° F
CWP 1-2	Cleared	TI-328	61° F
ASW Pp 1-1	In-service to CCW HX 1-1	TI-1484	61.5° F
ASW Pp 1-2	In-STBY	TI-1485	60° F
CWP 2-1	Cleared	TI-311	61° F
CWP 2-1	Cleared	TI-328	61° F
ASW Pp 2-1	In-service to CCW HX 2-1	TI-1484	62° F
ASW Pp 2-2	Cleared	TI-1485	61° F

Initiating Cue: Unit 1 BOPCO has just completed STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Step 39.

BOPCO has determined that the Ultimate Heat Sink Temperature is satisfactory for the given conditions.

Review the completed STP data sheet and determine if his assessment is correct and implement any actions needed based on your review.

Task Standard: STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Step 39 reviewed for completeness and any actions implemented based on your review.

Start Time:

Step

Expected Operator Actions

1. Operator obtains correct procedure

1.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

Operator obtains completed STP I-1A,
Attachment 11.1, Pages 10-12

**Cue: Provide candidate with exam copy
of STP I-1A, Attachment 11.1,
Pages 10-12.**

Step was: Sat: _____ Unsat _____*

1.2 2. Operator verifies UHS
temperature method 1.

2.1

Verifies that the Pacific Ocean water
temperature of 61° F is entered for
TI-311.

2.2 Verifies that Method 1 is invalid
based on Notes 1 and 2, verifies N/A
box is marked and goes to Method 2.

**Note: Operator should refer to Note 1,
requires minimum of 2 indicators,
since CWP 1-2 is not running TI-
328 is not valid.**

Step was: Sat: _____ Unsat _____*

2.3

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

3. ** Operator verifies UHS temperature using method 2.

Verifies Pacific Ocean water temperatures, 61.5° F on TI-1484 on Unit 1 & 62° F on TI-1484 on Unit 2

3.1

3.2 Verifies the highest of the available indicators, 62° F.

Note: Unit 2 TI-1484 is reading highest at 62.0° F

3.3 Verifies proper correction factor based on available indications of 0.3° F.

3.4 Determines correction factor of 0.7° F was improperly used.

3.5 Determines corrected Pacific Ocean water temperature to be 62.3° F, Verifies step initialed.

Step was: Sat: _____ Unsat _____*

3.6 4. Operator verifies UHS temperature using method 3.

4.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

Verifies operator marked N/A box.

Step was: Sat: _____ Unsat _____*

4.2 5. **Operator verifies results

5.1

Determines that N/A box for step d was marked incorrectly and that corrected Pacific Ocean water temperature is unsatisfactory.

5.2 Determines that N/A box for step e was marked correctly and that corrected Pacific Ocean water temperature is satisfactory for this step.

Step was: Sat: _____ Unsat _____*

5.3

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

INSTRUCTOR WORKSHEET

6. **Operator determines appropriate actions based on review of STP.

Determines that corrected Pacific Ocean water temperature is above the Tech Spec Limit.

6.1

6.2 Operator references Tech Spec. 3.7.12 for Ultimate Heat Sink.

6.3 Operator determines that increased monitoring is required and the Unit 1 CO should record Pacific Ocean water temperature every 2 hours in his logs.

Step was: Sat: _____ Unsat _____*

6.4

Stop Time:

Total Time: (Enter total time on the cover page)

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Initial Conditions: Unit 1 is at 50% power with CWP 1-2 out of service for replacement of damaged screens. Unit 2 is in day 14 of a refueling outage.

Current plant conditions for the Circ Water and ASW systems are as follows:

<u>Component</u>	<u>Status</u>	<u>Current Ocean Water Temperature</u>	
CWP 1-1	In-service	TI-311	61° F
CWP 1-2	Cleared	TI-328	61° F
ASW Pp 1-1	In-service to CCW HX 1-1	TI-1484	61.5° F
ASW Pp 1-2	In-STBY	TI-1485	60° F
CWP 2-1	Cleared	TI-311	61° F
CWP 2-1	Cleared	TI-328	61° F
ASW Pp 2-1	In-service to CCW HX 2-1	TI-1484	62° F
ASW Pp 2-2	Cleared	TI-1485	61° F

Initiating Cue: Unit 1 BOPCO has just completed STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Step 39.

BOPCO has determined that the Ultimate Heat Sink Temperature is satisfactory for the given conditions.

Review the completed STP data sheet and determine if his assessment is correct and implement any actions needed based on your review.

Task Standard: STP I-1A, Routine Shift Checks Required by Licenses, Attachment 11.1, Step 39 reviewed for completeness and any actions implemented based on your review.

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: ADMNRC-8
Title: PERFORM TRANSFER SWITCH ALIGNMENT VERIFICATION

Examinee:

Evaluator:

	Print	Signature	Date
Results:	Sat	Unsat	Total Time: minutes

Comments: **PERFORM INPLANT DURING PLANT WALKTHRU**

References: OP K-10X27, Sealed Transfer Switch Procedure, Rev 16, Attach. 9.1
OP1.DC20, Sealed Components, Rev. 9, Attach. 6.4

Alternate Path: Yes No

Time Critical: Yes No

Time Allotment: 15 Minutes

Critical Steps: 3, 4, 5, 6

Job Designation: RO/SRO

Task Number: G2.1.30

AUTHOR: DAVE BURNS DATE: 2/3/2000

REVIEWED BY: N/A DATE: N/A
JPM COORDINATOR

APPROVED BY: N/A DATE: N/A
TRAINING LEADER

REV. 0

Rating: 3.9/3.4

- Directions:** **No plant controls or equipment are to be operated during the performance of this Job Performance Measure.** All actions taken by the examinee should be clearly demonstrated and verbalized to the evaluator. The student will be given the initial conditions, initiating cue, and task standard. The examiner will then ask if any clarifications are needed. The examinee may be given the procedure and told the step with which to begin.
- Required Materials:** None
- Initial Conditions:** Units 1 and 2 are both at 100% power.
- Initiating Cue:** Unit 1 Shift Foreman directs you to perform the 6 month verification (per OP1.DC20 step 4.5.3) of OP K-10X27, Attachment 9.1 - "Transfer Switch Alignment Checklist", for COMMON EQUIPMENT.
- Task Standard:** Verification of Transfer Switch Alignment Checklist for "COMMON EQUIPMENT", is completed and Shift Foreman notified.

Start Time:

Step

Expected Operator Actions

1. Operator obtains correct procedures

1.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator obtains OP K-10X27 attachment
9.1 for common equipment.

**Note: Provide candidate with exam
copy of OP K-10X27.**

1.2 Operator obtains OP1.DC20
Attachment 6.4.

**Note: Provide candidate with exam
copy of OP1.DC20 Attach. 6.4**

Step was: Sat: _____ Unsat _____*

1.3 2. Operator reviews procedure

2.1

Operator reviews OP1.DC20 instructions
step 4.5.3

**Note: Candidate should review step
4.5.3 and determine that steps a, b
and c apply to this task.**

Step was: Sat: _____ Unsat _____*

2.2 3. **Verifies position of DSL
Fuel Oil Pp 0-2 Transfer Switch

3.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator locates DSL Fuel Oil Pp 0-2 transfer switch in Unit 1 480v Bus 1G room.

3.2 Operator visually verifies the position of the transfer switch and location of seal.

Cue: Transfer switch is sealed in the NORMAL position.

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

4. **Verifies position of DSL Fuel Oil Pp
0-1 Transfer Switch

4.1

Operator locates DSL Fuel Oil Pp 0-1
transfer switch in Unit 1 480v Bus 1H
room.

4.2 Operator visually verifies the position
of the transfer switch and location of
seal.

**Cue: Transfer switch is sealed in the
NORMAL position.**

Step was: Sat: _____ Unsat _____*

4.3 5. **Verifies position of
EPTSN - Technical Support Center
Power Transfer Switch

5.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator locates EPTSN - Technical
Support Center Power transfer switch
in Unit 2 480v Bus 2F room.

5.2 Operator visually verifies the position
of the transfer switch and location of
seal.

**Cue: Transfer switch is sealed in the
NORMAL position.**

Step was: Sat: _____ Unsat _____*

5.3

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

6. **Verifies position of EPTSC -
Technical Support Center Power
Transfer Switch

6.1

Operator locates EPTSC - Technical Support
Center Power transfer switch in Unit
2 480v Bus 2F room.

6.2 Operator visually verifies the position
of the transfer switch and location of
seal.

**Cue: Transfer switch is in the
NORMAL position and the SEAL
is missing.**

6.3 Operator contacts the SFM informs
him of his findings.

**Cue: Inform candidate that the SFM
directs him to re-seal the
component.**

6.4 Operator goes to control room and
locates replacement seal.

**Note: Once seal is located in control
room, leave seal in control room.**

6.5 Operator returns to transfer switch
and installs seal.

Step was: Sat: _____ Unsat _____*

6.6 7. Operator completes 6 month
verification form.

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

7.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator signs and dates verification form
and returns it to Shift Foreman.

Step was: Sat: _____ Unsat _____*

7.2

Stop Time:

Total Time: (Enter total time on the cover page)

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Initial Conditions: Units 1 and 2 are both at 100% power.

Initiating Cue: Unit 1 Shift Foreman directs you to perform the 6 month verification (per OP1.DC20 step 4.5.3) of OP K-10X27, Attachment 9.1 - "Transfer Switch Alignment Checklist", for COMMON EQUIPMENT.

Task Standard: Verification of Transfer Switch Alignment Checklist for "COMMON EQUIPMENT", is completed and Shift Foreman notified.

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: ADMNRC-9RO
Title: PERFORM OUTAGE SAFETY CHECKLIST

Examinee:

Evaluator:

	Print	Signature	Date
Results:	Sat	Unsat	Total Time: minutes
Comments:			

References: AD8.DC55, Outage Safety Scheduling, Attach. 7.12, Rev. 11

Alternate Path: Yes No

Time Critical: Yes No

Time Allotment: 10 Minutes

Critical Steps: 2,3,4,5,6

Job Designation: RO

Task Number: G2.2.26

Rating: 2.5

AUTHOR: _____ DAVE BURNS _____ DATE: _____ 2/3/2000 _____

REVIEWED BY: _____ N/A _____ DATE: _____ N/A _____
JPM COORDINATOR

APPROVED BY: _____ N/A _____ DATE: _____ N/A _____
TRAINING LEADER

REV. 0

Directions: **No plant controls or equipment are to be operated during the performance of this Job Performance Measure.** All actions taken by the examinee should be clearly demonstrated and verbalized to the evaluator. The student will be given the initial conditions, initiating cue, and task standard. The examiner will then ask if any clarifications are needed. The examinee may be given the procedure and told the step with which to begin.

Required Materials: None

Initial Conditions: Unit 1 is currently in Mode 6 with Core Onload in progress.

Current plant parameters are as follows:

Offsite power sources:	Startup power - Operable Aux power - Cleared
Onsite power sources:	Diesel Generator 1 - Cleared Diesel Generator 2 - Operable Diesel Generator 3 - Operable
Onsite distribution system:	4kV & 480v Bus F - Operable 4kV & 480v Bus G - Operable 4kV & 480v Bus H - Cleared
Instrument AC Inverters :	IY1 - Operable IY2 - Operable IY3 - Cleared IY4 - Operable
FHB Ventilation Status:	Fan E-5 - Operable Fan E-6 - Operable
Charging Pump Status:	CCP1 - Operable CCP2 - Cleared

Initiating Cue: The Shift Foreman directs you to perform the AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems for the current plant conditions.

Task Standard: AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems completed and results given to Shift Foreman.

Start Time:

Step

Expected Operator Actions

1. Operator obtains the correct procedure.

1.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator obtains AD8.DC55, Attachment
7.12, Mode 6 Outage Safety Checklist
for Vital AC Sources.

**Cue: Provide candidate with exam copy
of Attachment 7.12**

Step was: Sat: _____ Unsat _____*

1.2 2. **Operator determines 4kV
& 480v operability.

2.1

Operator determines 4kV & 480v buses F &
G are operable an annotates check list.
Step was: Sat: _____ Unsat _____*

2.2 3. **Operator determines
Instrument AC bus operability.

3.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator determines that IY1, IY2 and IY4
are operable and annotates checklist.

Step was: Sat: _____ Unsat _____*

3.2 4. **Operator determines status
of refueling cavity.

4.1

Operator determines that refueling cavity is
greater than 23' and that List A is
required and annotates checklist.

Step was: Sat: _____ Unsat _____*

4.2

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

5. ****Operator determines status of offsite power sources**

5.1

Operator determines that Startup Power is operable and annotates checklist.

5.2 Operator determines that Diesel Generators 2 & 3 are operable and annotates checklist.

Step was: Sat: _____ Unsat _____*

5.3 6. ****Operator determines status of core alterations.**

6.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator determines core alterations are
inprogress.

6.2 Operator determines that Diesel Gen
3, Fan E-5 and CCP 1 are operable.

Step was: Sat: _____ Unsat _____*

6.3 7. Operator reports status of
Vital AC Outage Safety Checklist.

7.1

Operator reports to SFM that Vital AC
Outage Safety Checklist is complete
and Vital AC safety function is
satisfied.

Step was: Sat: _____ Unsat _____*

7.2

Stop Time:

Total Time: (Enter total time on the cover page)

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Initial Conditions: Unit 1 is currently in Mode 6 with Core Onload in progress.

Current plant parameters are as follows:

Offsite power sources: Operable

Aux power - Cleared

Onsite power sources:

Diesel Generator 1 - Cleared

Diesel Generator 2 - Operable

Diesel Generator 3 - Operable

Onsite distribution system:

4kV & 480v Bus F - Operable

4kV & 480v Bus G - Operable

4kV & 480v Bus H - Cleared

Instrument AC In Operable

IY2 - Operable

IY3 - Cleared

IY4 - Operable

FHB Ventilation - Operable

Fan E-6 - Operable

Charging Pump - Operable

CCP2 - Cleared

Initiating Cue: The Shift Foreman directs you to perform the AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems for the current plant conditions.

Task Standard: AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems completed and results given to Shift Foreman.

Number: ADMNRC-9SRO
Title: VERIFY OUTAGE SAFETY CHECKLIST

Examinee:

Evaluator:

	Print	Signature	Date
Results:	Sat	Unsat	Total Time: minutes
Comments:			

References: AD8.DC55, Outage Safety Scheduling, Attach. 7.12, Rev. 11

Alternate Path: Yes No

Time Critical: Yes No

Time Allotment: 10 Minutes

Critical Steps:

Job Designation: SRO

Task Number: G2.2.26

Rating: 3.7

Directions: **No plant controls or equipment are to be operated during the performance of this Job Performance Measure.** All actions taken by the examinee should be clearly demonstrated and verbalized to the evaluator. The student will be given the initial conditions, initiating cue, and task standard. The examiner will then ask if any clarifications are needed. The examinee may be given the procedure and told the step with which to begin.

Required Materials: None

Initial Conditions: Unit 1 is currently in Mode 6 with Core Onload in progress.

Current plant parameters are as follows:

Offsite power sources:	Startup power - Cleared Aux power - Operable
Onsite power sources:	Diesel Generator 1 - Cleared Diesel Generator 2 - Operable Diesel Generator 3 - Operable Diesel Generator X-TIE - Operable
Onsite distribution system:	4kV & 480v Bus F - Operable 4kV & 480v Bus G - Operable 4kV & 480v Bus H - Cleared
Instrument AC Inverters :	IY1 - Operable IY2 - Operable IY3 - Cleared IY4 - Operable
FHB Ventilation Status:	Fan E-5 - Cleared Fan E-6 - Operable
Charging Pump Status:	CCP1 - Operable CCP2 - Cleared

Initiating Cue: Unit 1 Control Operator has just completed AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems for the current plant conditions.

Control Operator has determined that the Mode 6 Outage Safety Checklist for Vital AC Power is satisfactory for the given conditions.

Review the completed Outage Safety Checklist and determine if his assessment is correct and implement any actions needed based on your review.

Task Standard: AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems reviewed for completeness and any actions implemented based on your review.

Start Time:

Step

Expected Operator Actions

1. Operator obtains the correct procedure.

1.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator obtains AD8.DC55, Attachment
7.12, Mode 6 Outage Safety Checklist
for Vital AC Sources.

**Cue: Provide candidate with exam copy
of Attachment 7.12**

Step was: Sat: _____ Unsat _____*

1.2 2. **Operator verifies 4kV &
480v operability.

2.1

Operator verifies 4kV & 480v buses F & G
are operable.

Step was: Sat: _____ Unsat _____*

2.2 3. **Operator verifies
Instrument AC bus operability.

3.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator verifies that IY1, IY2 and IY4 are operable.

Step was: Sat: _____ **Unsat** _____*

3.2 4. **Operator verifies status of refueling cavity.

4.1

Operator verifies that refueling cavity is greater than 23' and that List A is required.

Step was: Sat: _____ **Unsat** _____*

4.2

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

5. ****Operator verifies status of offsite power sources**

5.1

Operator verifies that Aux Power is operable and D/G X-TIE is operable.

5.2 Operator verifies that Diesel Generators 2 & 3 are operable and annotates checklist.

Step was: Sat: _____ Unsat _____*

5.3 6. ****Operator verifies status of core alterations.**

6.1

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Operator verifies core alterations are
inprogress.

6.2 Operator determines that Diesel Gen
3, Fan E-5 and CCP 1 are not all
operable. Fan E-5 is cleared.

Step was: Sat: _____ **Unsat** _____*

6.3 7. Operator determines
appropriate actions based on review
of Vital AC Outage Safety Checklist.

7.1

Operator determines that Vital AC Outage
Safety Checklist is not complete and
Vital AC safety function is not
satisfied.

7.2 Operator determines that Refueling
SRO should be notified to stop core
onload.

Step was: Sat: _____ **Unsat** _____*

7.3

Stop Time:

Total Time: (Enter total time on the cover page)

*Denotes an entry required on the JPM cover sheet.

**Denotes a Critical Step.

Initial Conditions: Unit 1 is currently in Mode 6 with Core Onload in progress.

Current plant parameters are as follows:

Offsite power sources: Cleared

Aux power - Operable

Onsite power sources:

Diesel Generator 1 - Cleared

Diesel Generator 2 - Operable

Diesel Generator 3 - Operable

Diesel Generator X-TIE - Operable

Onsite distribution system:

4kV & 480v Bus F - Operable

4kV & 480v Bus G - Operable

4kV & 480v Bus H - Cleared

Instrument AC In Operable

IY2 - Operable

IY3 - Cleared

IY4 - Operable

FHB Ventilator 5 Cleared

Fan E-6 - Operable

Charging Pump 1 Operable

CCP2 - Cleared

Initiating Cue: Unit 1 Control Operator has just completed AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems for the current plant conditions.

Control Operator has determined that the Mode 6 Outage Safety Checklist for Vital AC Power is satisfactory for the given conditions.

Review the completed Outage Safety Checklist and determine if his assessment is correct and implement any actions needed based on your review.

Task Standard: AD8.DC55, Attachment 7.12, Mode 6 Outage Safety Checklist for Vital AC systems reviewed for completeness and any actions implemented based on your review.

CATEGORY: A.4
TOPIC: Emergency Plan
KA: G4.4.29 (2.6)
Job Designation: RO

Reference Allowed: YES

Reference: LPE-2, Obj. 36, Pg. 29, and EP G-3, Notification of OFF-site Agencies and Emergency Response Organization Personnel, Rev 31A, Step 7.1.6 & Attach. 9.4.

QUESTION # 1:

Given the following:

- Unit 1 developed a Primary system leak of 75 gpm, Safety Injection was actuated and recovery actions are in progress.
- Unit 1 Shift Foreman declared an ALERT due to the primary leak rate.
- All off-site notifications have been completed for the ALERT Classification.
- During recovery actions the SFM escalates the Event Classification to a SITE AREA EMERGENCY due to the inability to maintain Pressurizer level greater than 4%.
- The Technical Support Center and Emergency Off-site Facility are not manned at this time.

Other than those agencies previously notified of the ALERT, what additional agency must be notified of the SITE AREA EMERGENCY?

ANSWER:

US Coast Guard (Marine Safety Office, Long Beach, Ca)

Candidate's Response: **SAT** _____ **UNSAT** _____

CATEGORY: A.4
TOPIC: Emergency Plan
KA: G2.4.39 (3.3)

Reference Allowed: YES

Reference: LEP-2, Obj. 26 pg. 23, EP G-2, Activation and Operation of the Interim Site Emergency Organization (Control Room), Rev. 20, Attach. 6.2

QUESTION # 2:

What is the minimum emergency event level classification that requires activation of the SITE EMERGENCY ALARM (assuming the Interim Site Emergency Coordinator desires the normal assembly process)?

ANSWER:

ALERT

Candidate's Response: **SAT** _____ **UNSAT** _____

CATEGORY: A.4

QUESTION # 1:

References Allowed: YES

Given the following:

- Unit 1 developed a Primary system leak of 75 gpm, Safety Injection was actuated and recovery actions are in progress.
- Unit 1 Shift Foreman declared an ALERT due to the primary leak rate.
- All off-site notifications have been completed for the ALERT Classification.
- During recovery actions the SFM escalates the Event Classification to a SITE AREA EMERGENCY due to the inability to maintain Pressurizer level greater than 4%.
- The Technical Support Center and Emergency Off-site Facility are not manned at this time.

Other than those agencies previously notified of the ALERT, what additional agency must be notified of the SITE AREA EMERGENCY?

CATEGORY: A.1

QUESTION # 2:

References Allowed: YES

What is the minimum emergency event level classification that requires activation of the SITE EMERGENCY ALARM (assuming the Interim Site Emergency Coordinator desires the normal assembly process)?

CATEGORY: A.3
TOPIC: Exposure Limits
KA: G2.3.1 (3.0)
Job Designation: SRO

Reference Allowed: YES

Reference: RP9T, Obj. 1.1, Pg. 4, and RP1.ID6, Personnel Dose Limits and Monitoring Requirements, Attachment 10.1, Rev 5.

QUESTION # 1:

Given the following:

A thirty five (35) year old Nuclear Operator with complete exposure records has the following exposure record for the current calendar year:

- Shallow Dose Equivalent 2.55 rem
- Committed Dose Equivalent 0.75 rem
- Deep Dose Equivalent 2.13 rem
- Lens Dose Equivalent 3.08 rem
- Committed Effective Dose Equivalent 1.95 rem

Determine this individuals Total Effective Dose Equivalent (TEDE) for the current year.

ANSWER:

4.08 rem (DDE+CEDE)

_____ **Candidate's Response:** **SAT** _____ **UNSAT** _____

CATEGORY: A.3
TOPIC: Radiation Work Permits
KA: G2.3.7 (3.3)

Reference Allowed: YES

Reference: RP1.ID9, Radiation Work Permits, Rev. 2, Page 6

QUESTION # 2:

An Nuclear Operator has been assigned the task of entering a High High radiation area to perform a valve line-up. His expected dose for the task is 100 mrem.

What type radiation work permit work would be required for this task?

ANSWER:

Special Radiation Work Permit (SWP)

 Candidate's Response: **SAT** **UNSAT**

CATEGORY: A.3

QUESTION # 1:

References Allowed: YES

Given the following:

A thirty five (35) year old Nuclear Operator with complete exposure records has the following exposure record for the current calendar year:

- Shallow Dose Equivalent 2.55 rem
- Committed Dose Equivalent 0.75 rem
- Deep Dose Equivalent 2.13 rem
- Lens Dose Equivalent 3.08 rem
- Committed Effective Dose Equivalent 1.95 rem

Determine this individuals Total Effective Dose Equivalent (TEDE) for the current year.

CATEGORY: A.3

QUESTION # 2:

References Allowed: YES

An Nuclear Operator has been assigned the task of entering a High High radiation area to perform a valve line-up. His expected dose for the task is 100 mrem.

What type radiation work permit work would be required for this task?