NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: LJCNRC-15

Title: RESTORE BANK ALIGNMENT FOR A MISALIGNED ROD

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: OP AP-12B, Control Rod Misalignment, Rev. 8A

Alternate Path: Yes No X

Time Critical: Yes No X

Time Allotment: 15 minutes

Critical Steps: 5, 8, 13

Job Designation: RO/SRO

Task Number: 001A2.17

Rating: 3.3/3.8

AUTHOR:	DAVE BURNS	DATE:	3/27/2000
REVIEWED BY:	N/A	DATE:	N/A
	JPM COORDINATOR		
APPROVED BY:	N/A	DATE:	N/A
	TRAINING LEADER		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. 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 holding at 75% power.
Initiating Cue:	A ramp to 100% power was stopped at 75% due to rod K-2 being misaligned on control bank D. Maintenance Services corrected the problem and the Shift Foreman directs you to restore rod K-2 to its bank alignment and return Rod Control to Manual.
Task Standard:	Control bank D alignment is restored, with Rod Control in Manual.

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.

Operator references OP AP-12B.

****

Cue: Begin at step 14.

****

Step was: Sat: _____ Unsat: _____*

1.2 2. Verify power will be less than 90% after the rod is recovered.

2.1

Operator check power at ~75%.

Step was: Sat: _____ Unsat: _____*

2.2 3. Record the position of the P to A converter and open the lift coil disconnect switches.

3.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator contact a local operator to record the position of the P to A converter and to open the lift coil disconnect switches for all rods in control bank D except for rod K-2. (Only calling for lift coil disconnects to be opened is critical.)

****

Cue: Local operator reports that the P to A converter positions are recorded (207).

****

Note: Console operator must open lift coil disconnects.

Step was: Sat: _____ Unsat: _____*

3.2

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

4. During rod recovery observe limits	Rod withdrawl rate specified by Reactor Engineering.
	**
4.1	**Cue: Reactor Engineering has no limit at this time.**
	**
	Step was: Sat: _____ Unsat: _____*
4.2	5. ** Drive the misaligned rod to the desired DRPI position.
5.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator drives rod K-2 to the same DRPI position as the other rods in control bank D.

Step was: Sat: _____ Unsat: _____*

5.2 6. Close all lift coil disconnect switches.

6.1

Operator contacts the local operator to close all the lift coil disconnect switches for all rods in control bank D.

Step was: Sat: _____ Unsat: _____*

6.2

7. Check the power cabinet with the Urgent alarm to make sure that only the regulation failure detector light is lit as shown in Appendix C.

7.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Directs the local operator to verify.

****

Cue: Local operator reports power cabinet 1BD lift regulation failure light is ON.

****

Step was: Sat: _____ Unsat: _____*

8.

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

9. ** Clear the ROD URGENT FAILURE alarm (PK03-17).	Operator depresses the rod control urgent failure reset push button.
9.1	9.2 Verifies that alarm window PK03-17 is reset. (Not Critical)
	Step was: Sat: _____ Unsat: _____*
	9.3 10. Manually adjust group step counters.
10.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator manually adjusts control bank D group 1 and 2 step counters to their previous position.

****

Cue: Previous recorded positions for Step 12.c were 207.

****

Step was: Sat: _____ Unsat: _____*

10.2 11. Reset the P to A converter.

11.1

Operator contacts the local operator to reset the P to A converter to the previously recorded position.

Note: Console operator must reset P to A converter.

Step was: Sat: _____ Unsat: _____*

11.2

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

12. Reset the plant process computer bank position to the value recorded earlier.	Operator chooses RBU on the keyboard
12.1	12.2 Hits F1.
	12.3 Updates bank D.
	12.4 Hits F2 to save.
	Step was: Sat: _____ Unsat: _____*
13. Verify the bank overlap unit reading corresponds to the bank step counters.	
13.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator contacts the local operator to check the bank overlap unit.

****

Cue: The bank overlap unit reading is correct for the current rod position.

****

Step was: Sat: _____ Unsat: _____*

13.2 14. ** Place Rod Control in MAN.

14.1

Operator places ROD BANK/MODE SELECT switch to MAN position.

Step was: Sat: _____ Unsat: _____*

14.2

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 holding at 75% power.

Initiating Cue: A ramp to 100% power was stopped at 75% due to rod K-2 being misaligned on control bank D. Maintenance Services corrected the problem and the Shift Foreman directs you to restore rod K-2 to its bank alignment and return Rod Control to Manual.

Task Standard: Control bank D alignment is restored, with Rod Control in Manual.

☐ Initialize the simulator to LJCNRC15 - "init LJCNRC15"

OR

☐ Initialize the simulator to IC-2 (75%, BOL).

☐ Enter drill file 1067 or manually insert the following:

Command	Description
1. mal rod4a act,1,k2,0,d,mcrfpa(14).gt.207	Stick rod K-2, CLEAR when bank D group 2 is greater than 207 steps
2. mal rcs5 act,1500,300,0,d, mcrfpa(14).gt.207	Boron change steps rods out greater than 12 steps
3. frz when mcrfpa(14).gt.207 Run	Freeze when bank D group 2 is greater than 207 steps

☐ After sim freezes, place Rod bank/mode switch to Manual.

☐ Run sim for ~5 seconds.

☐ Place Rod bank/mode select switch to CB D position.

Perform the following after either setup:

☐ Verify step counters and RBU are updated to bank D at 190 steps

☐ Inform the examiner that the simulator setup is complete.

☐ Go to RUN when the examinee is given the cue sheet.

☐ If requested to check P/A converter position for Bank D, check LOA rod5 value.

☐ When requested, open lift coil disconnects on all rods in Bank D except for rod K-2 or run drill file 93.

☐ If asked, report only Power Cabinet 1BD lift regulation failure light is on.

☐ When requested, reset P to A converter as follows: loa rod5 act,209,0,0,d,0

☐ When requested to close lift coil disconnects clear all disc switches listed on the override

status menu if drill file 93 was used. Otherwise locally close the disconnects previously opened.

☐ If asked for Bank Overlap Unit value, check LOA rod8 value.

Number: LJCNRC-16

Title: RESTORATION OF BUSES AFTER A LOSS OF OFFSITE POWER

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: OP AP-26, "Loss of Offsite Power," Rev. 3

Alternate Path: Yes No X

Time Critical: Yes No X

Time Allotment:

Critical Steps: 3, 4, 6, 8, 10, 12

Job Designation: RO/SRO

Task Number: 062A4.07

Rating: 3.1/3.1

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. 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: The Reactor inadvertently tripped from 30% power. Subsequent to the trip, the Unit 1 S/U transformer faulted resulting in a loss of off-site power. All automatic actions occured as expected. To facilitate plant stabilization, it is desired to re-energize the non-vital buses. Backfeeding from the 500kV system is NOT AVAILABLE.

The following actions have already been completed:

- The MSIVs are closed.
- The vacuum breaker is open.
- The SJAEs are secured.
- The Gland Sealing Steam System is shutdown.
- PY-17 is on backup.
- A Spent Fuel Pit pump has been restarted.
- Pressurizer heaters are placed on their backup source.
- Hot Condenser cooldown is in progress.

Initiating Cue: The Shift Foreman directs you to prepare the buses for a return of power and to energize the Unit 1 Startup Bus from the Unit 2 Startup Bus in accordance with OP AP-26, Loss of Offsite Power.

Task Standard: Unit 1 Startup bus energized from Unit 2 Startup Bus.

Start Time:

Step	Expected Operator Actions
1.	Obtain the correct procedure and locate appropriate section
1.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator obtains OP AP-26 and locates Section A: Restoration of Buses.

****

Cue: Start at step 2

****

Step was: Sat: _____ Unsat _____*

1.2 2. Place all condensate and booster pump selector switches in MANUAL.

2.1

At VB-3, Operator locates all condensate and booster pump switches and places them in MANUAL.

Step was: Sat: _____ Unsat _____*

3. **Cutout auto transfer feature FCOs for all vital and non-vital 4kV and 12kV buses.

3.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator locates auto transfer to startup FCOs for 4kV buses H, G, F, D and E, and 12kV buses D and E.

3.2 Places auto transfer FCOs located above to CUTOUT position.

Step was: Sat: _____ Unsat _____*

3.3 4. **Depress all vital and non-vital 4kV and 12kV auto transfer relay push buttons.

4.1

Operator locates all auto transfer reset pushbuttons near respective FCO cutout switches.

4.2 Depress all auto transfer reset pushbuttons.

4.3 Verifies blue lights OUT.

Step was: Sat: _____ Unsat _____*

4.4

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

5. Open both non-vital 4kV Bus E supply breakers	Operator locates control switches for 4kV Bus E supply breakers.
5.1	5.2 Opens supply breakers (breakers indicate open): • 52-HE-2 • 52-HE-3 **Step was: Sat: _____ Unsat _____***
	5.3 6. ** Open both non-vital 4kV Bus E load breakers
	6.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator locates control switches for 4kV Bus E load breakers.

6.2 Opens load breakers (breakers indicate open):

- 52-HE-12
- 52-HE-10
- 52-HE-8
- 52-HE-7
- 52-HE-5
- 52-HE-4

Step was: Sat: _____ Unsat _____*

6.3 7. Open both non-vital 4kV Bus D supply breakers

7.1

Operator locates control switches for 4kV Bus D supply breakers.

7.2 Opens supply breakers (breakers indicate open):

- 52-HD-15
- 52-HD-14

Step was: Sat: _____ Unsat _____*

7.3

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

8. **Open both non-vital 4kV Bus D load breakers	Operator locates control switches for 4kV Bus D load breakers.
8.1	8.2 Opens load breakers (breakers indicate open): • 52-HD-6 • 52-HD-8 • 52-HD-10 • 52-HD-11 • 52-HD-12 • 52-HD-13 **Step was: Sat: _____ Unsat _____***
	8.3 9. Open non-vital 12kV Bus D and E supply breakers
	9.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator locates non-vital 12kV supply breakers.

9.2 Opens non-vital 12kV supply breakers (breakers indicate open):

- 52-VD-8
- 52-VD-4
- 52-VE-2
- 52-VE-6

Step was: Sat: _____ Unsat _____*

9.3 10. **Verify Unit 1 12kV Startup Bus breakers are open

10.1

Operator locates Unit 1 12kV Startup Bus breakers.

10.2 Verifies Unit 1 12kV Startup Bus breakers are open by indicating lights:

- 52-VU-11
- 52-VU-12

If breakers are closed, opens breakers by taking control switch to OPEN.

Step was: Sat: _____ Unsat _____*

10.3

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

11. Verify S/U XFMR Low Side Voltage Adjust pulled to Manual	Operator places S/U XFMER 1-1 Low Side VLTG Adjust to manual position (pulled out). **Step was: Sat: _____ Unsat _____***
11.1	
11.2 12. **Energize the Unit 1 Startup Bus from the Unit 2 Startup Bus	
12.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator verifies the Unit 2 Startup Bus is energized by asking Unit 2.

****

Cue: Unit 2 states that the Unit 2 Startup Bus is energized.

****

12.2 Closes the Startup bus crosstie breaker, 52-VU-11 by locating breaker and taking control switch to CLOSE. Breaker indicates closed.

12.3 Checks the Unit 1 Startup bus is energized by voltmeter reading approximately 12,000 volts

Step was: Sat: _____ Unsat _____*

12.4

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: The Reactor inadvertently tripped from 30% power. Subsequent to the trip, the Unit 1 S/U transformer faulted resulting in a loss of off-site power. All automatic actions occured as expected. To facilitate plant stabilization, it is desired to re-energize the non-vital buses. Backfeeding from the 500kV system is NOT AVAILABLE.

The following actions have already been completed:

- The MSIVs are closed.
- The vacuum breaker is open.
- The SJAEs are secured.
- The Gland Sealing Steam System is shutdown.
- PY-17 is on backup.
- A Spent Fuel Pit pump has been restarted.
- Pressurizer heaters are placed on their backup source.
- Hot Condenser cooldown is in progress.

Initiating Cue: The Shift Foreman directs you to prepare the buses for a return of power and to energize the Unit 1 Startup Bus from the Unit 2 Startup Bus in accordance with OP AP-26, Loss of Offsite Power.

Task Standard: Unit 1 Startup bus energized from Unit 2 Startup Bus.

☐ Initialize the simulator to snap LJCNRC16 - "init LJCNRC16"

☐ Run Drill 5001

OR

☐ Initialize the simulator to IC-23 (30%, BOL).

☐ Enter drill file 1210 or manually insert the following:

Command	Description
1. mal PPL4A act,0,0,0,d,0	Reactor trip breakers inadvertent openings, Train A.
2. mal PPL4B act,0,0,0,d,0	Reactor trip breakers inadvertent openings, Train B.
3. ovr xv5i232o act, 1,0,0,d,0 vb5058d	eps: 52vul2: s/u sfmr 1-1 12kv bkr
4. ovr xv5o405w sct,0,0,0,d,0 vb5053a	eps: 12kv s/u bus s/u xfmr 1-1 potential light

☐ Perform the following:

1. Place the simulator in RUN.
2. Take actions of E-0 to ensure plant is stable after the trip and loss of power.
3. Especially ensure proper AFW flow and no SI occurs.
4. Acknowledge all annunciators.
5. When plant conditions are stable, freeze the simulator.

☐ Inform the examiner that the simulator setup is complete.

☐ Go to RUN when the examinee is given the cue sheet.

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: LJCNRC-17

Title: RESPOND TO A STEAM GENERATOR TUBE FAILURE

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: OP AP-3, Steam Generator Tube Failure, Rev 3A

Alternate Path: Yes No X

Time Critical: Yes No X

Time Allotment: 10 minutes

Critical Steps: 2

Job Designation: RO/SRO

Task Number: 035A2.01

Rating: 4.5/4.6

AUTHOR:	DAVE BURNS	DATE:	1/23/2000
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. 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 at 100% power. A tube leak exists in one of the steam generators. Annunciators PK11-06, SJAE HI-RAD and PK11-17, SG BLOW DOWN HI-RAD, are in alarm.
Initiating Cue:	The Shift Foreman directs you to perform the actions necessary to identify the leaking steam generator, in accordance with OP AP-3, Step 5.
Task Standard:	The leaking steam generator identified, per OP AP-3.

Start Time:

Step	Expected Operator Actions
1.1	1. Obtain the correct procedure.

*****Denotes an entry required on the JPM cover sheet.
******Denotes a Critical Step.

References OP AP-3, step 5.

1.2 Reads NOTE prior to step 5.

Step was: Sat: _____ Unsat _____*

1.3

2. **Determine affected steam generator.

Note: Determination of the affected steam generator by sub-step 2.1 or 2.2 is the only part that is critical of step 2.

2.1 Checks main steam line radiation monitors and notes steam lead 3 reading higher than rest.

2.2 Checks main steam line trend recorders and notes steam lead 3 reading higher than rest.

2.3 Verifies the blowdown inside containment isolation valves and blowdown sample valves positions and goes to RNO.

2.4 Operator verifies Steam Generator Blowdown Hi Radiation signal caused closure of blowdown sample valves by checking PK11-17 ON (or was ON).

2.5 Places "RE-19 & 23 HI RAD S/G BD & SMPL VLVS (O.C.) ISOL DEFEAT C/O SW" to the cut in position.

2.6 Opens the blowdown sample valves, FCV-250, 248, 246, and 244.

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

2.7 Contacts Chemistry Foreman to sample all steam generators per CAP AP-1. (Also may direct CAP D-15)

***** Denotes an entry required on the JPM cover sheet.
****** Denotes a Critical Step.

****

Cue: Chemistry Foreman will begin sampling per CAP AP-1.

****

Step was: Sat: _____ Unsat _____*

2.8

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 100% power. A tube leak exists in one of the steam generators. Annunciators PK11-06, SJAE HI-RAD and PK11-17, SG BLOW DOWN HI-RAD, are in alarm.

Initiating Cue: The Shift Foreman directs you to perform the actions necessary to identify the leaking steam generator, in accordance with OP AP-3, Step 5.

Task Standard: The leaking steam generator identified, per OP AP-3.

☐ Initialize the simulator to snap LJCNRC17 - "init LJCNRC17"

OR

☐ Initialize the simulator to IC-1 (100%, BOL).

☐ .

☐ Enter drill file 1121 or manually insert the following:

Command	Description
1. mal rcs4c act,25,0,0,d,0	25 gpm steam generator 13 tube leak
2. run 120	Runs the simulator for 2 minutes

☐ Verify PPC screen UN1008 selected to "QP charging" display

☐ Verify PPC "PEN" running

☐ Inform the examiner that the simulator setup is complete.

☐ Go to RUN when the examinee is given the cue sheet.

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: LJCNRC-18

Title: INITIATE CONTAINMENT SPRAY MANUALLY

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: EOP FR-Z.1, Response to High Containment Pressure, Rev. 7

Alternate Path: Yes X No

Time Critical: Yes No X

Time Allotment: 5 minutes

Critical Steps: 3, 4

Job Designation: RO/SRO

Task Number: 026A4.01

Rating: 4.5/4.3

AUTHOR:	DAVE BURNS	DATE:	3/27/2000
REVIEWED BY:	N/A JPM COORDINATOR	DATE:	N/A
APPROVED BY:	N/A TRAINING LEADER	DATE:	N/A

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 experienced a LOCA. EOP E-1 is in progress and Safety Injection is reset.
Initiating Cue:	Containment pressure is 25 psig. The STA confirms a MAGENTA path on the Containment Critical Safety Function Status Tree. All higher priority critical safety functions have been addressed. The Shift Foreman directs you to manually initiate containment spray in response to the MAGENTA path on containment pressure.
Task Standard:	Containment spray is initiated.

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.

References EOP FR Z.1.

****

Cue: Start with Step 3.

****

Step was: Sat: _____ Unsat: _____*

2. Check if containment spray is required.

2.1 Checks if EOP ECA-1.1 is the procedure in effect.

2.2 Determines EOP E-1 is in progress (from initial conditions).

2.3 Checks containment pressure greater than 22 psig.

Step was: Sat: _____ Unsat: _____*

2.4 3. ** Start the containment spray pumps.

3.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Turns control switches to the START position for containment spray pumps 11 and 12.

3.2 Verifies pumps running by amps returning to normal and red light ON.

Step was: Sat: _____ Unsat: _____*

3.3 4. ** Align containment spray discharge by opening 9001A and B.

4.1 Determines that ECCS is aligned for injection flow.

4.2 Opens 9001A and B.

Step was: Sat: _____ Unsat: _____*

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

5. Verify spray add tank alignment for injection phase.	Verifies open 8992, 8994A, and 8994B. **Step was: Sat: _____ Unsat: _____*** **Note: Operator may look at flow on PAM panel for verification of approximately 2600 gpm for each spray header.**
5.1	

Stop 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 experienced a LOCA. EOP E-1 is in progress and Safety Injection is reset.

Initiating Cue: Containment pressure is 25 psig. The STA confirms a MAGENTA path on the Containment Critical Safety Function Status Tree. All higher priority critical safety functions have been addressed. The Shift Foreman directs you to manually initiate containment spray in response to the MAGENTA path on containment pressure.

Task Standard: Containment spray is initiated.

☐

Initialize the simulator to snap LJCNRC18 - "init LJCNRC18"

☐ Run Drill 5001

OR

☐ Initialize the simulator to IC-1 (100%, BOL).

☐ Enter drill file 1010 or manually insert the following:

Command	Description
ramp ccnmpmin=40,5,0,c,jpplcipb	Ensures cnm pressure >22 psig for jpm
delm pcnm937	Removes monitor from last run
monv pcnm937	Monitors containment pressure
mal ppl2a act,0,0,d,2	Inadvertent SI, Train A
mal ppl2b act,0,0,d,2	Inadvertent SI, Train B
run 120	RUNS simulator for 2 minutes
ovr xv1i118r act,1,0,60,c,fnispr.lt.10,15	Reset SI, Train A after 60 secs.
ovr xv1i119r act,1,0,60,c,fnispr.lt.10,15	Reset SI, train B after 60 secs.
mal rcs1 act,3,1,61,c,fnispr.lt.10,0	DBA LOCA
ovr xrei022h act,1,0,0,c,fnispr.lt.10,5	Reset MSR's
ovr xv3i2240 act,1,0,0,c,fnispr.lt.10,0	Stops CND/BSTR PP 1-2
ovr xv2i2600 act,1,0,0,c,fnispr.lt.10,0	Trips RCP 1-1
ovr xv2i2610 act,1,0,0,c,fnispr.lt.10,0	Trips RCP 1-2
ovr xv2i2620 act,1,0,0,c,fnispr.lt.10,0	Trips RCP 1-3
ovr xv2i2630	Trips RCP 1-4

act,1,0,0,c,fnispr.lt.10,0	

☐ Perform the following:

1. Verify MSR valves are closed.
2. Place FCV-53 and 54 in RECIRC.
3. Shut down condensate booster pump set 13, if running.
4. Select CSF-5 on SPDS.

☐ Inform the examiner that the simulator setup is complete.

☐ Go to RUN when the examinee is given the cue sheet.

Number: LJCNRC-19

Title: RESPOND TO SUBCOOLING MARGIN LO/LO-LO

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: AR PK05-07, SUBCOOLING MARGIN LO/LO-LO, Rev. 8

Alternate Path: Yes No X

Time Critical: Yes No X

Time Allotment: 10 minutes

Critical Step: 4

Job Designation: RO/SRO

Task Number: 0177A4.01

Rating: 3.8/4.1

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. 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 operating at 100% power.
Initiating Cue:	PK05-07, SUBCOOLING MARGIN LO/LO-LO alarms.
Task Standard:	Actions for PK05-07, SUBCOOLING MARGIN LO/LO-LO are addressed and the alarm is reset.

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.

Operator references AR PK05-07.
Step was: Sat: _____ Unsat _____*

1.2 2. Investigate cause of alarm.

2.1

Operator determines alarm input 1151, Subcooled Mon Lo-Lo Margin, is in alarm by using alarm typer and viewing YI-31 on VB-2 reading less than 20°F.
Step was: Sat: _____ Unsat _____*

2.2 3. Perform a channel check of RCS pressure and temperature.

3.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator determines that one channel of RCS hot leg temperature is higher than the others by viewing indications on VB-2 (TR-413 reading higher than others). **Step was: Sat: _____ Unsat _____***	Operator removes the affected channel from the subcooling margin monitor input behind VB-2 by taking switch 343A to LOOP OUT for TR-413. ********** **Cue: The Shift Foreman will address Technical Specification 3.3.3.6.** ********** **Step was: Sat: _____ Unsat _____***
3.2 4. ** Cut out the failed input into the subcooling margin monitor.	
4.1	4.2

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 operating at 100% power.

Initiating Cue: PK05-07, SUBCOOLING MARGIN LO/LO-LO alarms.

Task Standard: Actions for PK05-07, SUBCOOLING MARGIN LO/LO-LO are addressed and the alarm is reset.

☐

Initialize the simulator to snap LJCNRC19 - "init LJCNRC19"
OR

☐ Initialize the simulator to IC-1 (100%, BOL).

☐ Enter drill file 1128 or manually insert the following:

Command	Description
1. xmt rcs35 3,635,0,0,d,0	Fails TE-413A to 635°F
2. run 2	Runs Sim for 2 seconds

☐ Inform the examiner that the simulator setup is complete.

☐ Go to RUN when the examinee is given the cue sheet.

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: LJCNRC-20

Title: RESPOND TO HIGH ULTIMATE HEAT SINK TEMPERATURE

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: OP AP-11, Malfunction of CCW System, Section A, Rev. 16;

OP E-5:II ASW System Two CCW Heat Exchanger Operation, Rev. 7A

Alternate Path: Yes X No

Time Critical: Yes No X

Time Allotment: 10 Minutes

Critical Steps: 3,4,7,8,10

Job Designation: RO/SRO

Task Number: 008A4.10

AUTHOR:	DAVE BURNS	DATE:	2/01/2000
REVIEWED BY:	N/A	DATE:	N/A
	JPM COORDINATOR		
APPROVED BY:	N/A	DATE:	N/A
	TRAINING LEADER		REV. 0

Rating: 3.1/3.1

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. 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 at 100% power. During performance of STP I-1A it was determined that the Ultimate Heat Sink temperature was greater than 64° F.
Initiating Cue:	Unit 1 Shift Forman directs you to place both CCW heat exchangers in service using OP AP-11 "Malfunction of the CCW System" Section A , Step 5.
Task Standard:	Both CCW Heat exchangers are in service.

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.

References OP AP-11 Step 5

1.2 Determines need to reference OP E-5:II

1.3 References OP E-5:II - Step 6.1 Preferred Method

Step was: Sat: _____ Unsat _____*

1.4 2. Notifies Unit 2

2.1 Advises Unit 2 CO to place Unit 2 standby ASW pump in manual.

****

Cue: Unit 2 Standby ASW pump is in manual.

****

Step was: Sat: _____ Unsat _____*

2.2 3. **Opens second heat exchanger ASW inlet valve.

3.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Opens FCV-603
Step was: Sat: _____ Unsat _____*

3.2

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

4. **Starts second ASW pump	Monitors inservice Heat Exchanger DP on PI -45.
4.1	4.2 Selects Manual on ASW Pp 1-2 Standby selector switch.
	4.3 Starts ASW Pp 1-2
	4.4 Determines that ASW Pp 1-2 trips on thermal overload.
	4.5 Notifies SFM of ASW Pp 1-2 failure.
	**********
	Cue: If asked, SFM directs that the second CCW Heat Exchanger be placed in service.
	**********
	Step was: Sat: _____ Unsat _____*
	4.6 5. Obtain the correct procedure
	5.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

References OP E-5:II - Step 6.2 Alternate Method.

Step was: Sat: _____ Unsat _____*

5.2 6. Place Standby Pp in Manual

6.1

Verifies that ASW Pp 1-2 Standby selector switch is in manual.

Step was: Sat: _____ Unsat _____*

6.2 7. **Open or check open ASW Pump discharge crosstie valves.

7.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Verifies Red light on and Green light off for FCV-495.

7.2 Verifies Red Light on and Green light off for FCV-496

Step was: Sat: _____ Unsat _____*

7.3

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

8. ** Opens second heat exchanger ASW inlet valve	Opens or checks open FCV-603
	Note: Valve was opened previously
8.1	**Step was: Sat: _____ Unsat _____***
8.2 9. Monitor ASW Pp. performance	
9.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Monitors ASW Pp 1-1 motor amps and flows

Step was: Sat: _____ Unsat _____*

9.2 10. **Cut in CCW to second Heat Exchanger

10.1

Opens FCV-431

Note: Task is complete at this step

Step was: Sat: _____ Unsat _____*

10.2

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 at 100% power. During performance of STP I-1A it was determined that the Ultimate Heat Sink temperature was greater than 64° F.
Initiating Cue:	Unit 1 Shift Forman directs you to place both CCW heat exchangers in service using OP AP-11 "Malfunction of the CCW System" Section A , Step 5.
Task Standard:	Both CCW Heat exchangers are in service.

☐

Initialize the simulator to snap LJCNRC20 - "init LJCNRC20"
OR

☐ Initialize the simulator to IC-01 (100%, BOL).

☐ Manually insert the following:

Command	Description
1. plp aux1 act, 64.2,0,0,d,0 #TOCEAN	Raises UHS temperature to greater than 64° F
2. pmp asw2 6,8,0,0,d,0	Overcurrent trip of ASW Pp 1-2 when started

☐ Inform the examiner that the simulator setup is complete.

☐ Go to RUN when the examinee is given the cue sheet.

Number: LJCNRC-21

Title: TRANSFER TO COLD LEG RECIRCULATION

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: EOP E-1.3, Transfer to Cold Leg Recirculation, Rev. 17A~~13~~

Alternate Path: Yes X No

Time Critical: Yes X No

Time Allotment: 20 minutes (must have recirc flow to the RCS prior to RWST reaching 4%)

Critical Steps: 7, 8, 9, 12, 13, 14, 15, 16, 23

Job Designation: RO/SRO

Task Number: 006A4.07

Rating: 4.4/4.4

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. 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 experienced a large break LOCA and RWST level decreased to less than 33%.
Initiating Cue:	The Shift Foreman directs you to align for cold leg recirculation, per EOP E-1.3 steps 1 through 9.
Task Standard:	RHR has been aligned to the suction of the SI pumps and CCPs for cold leg recirculation.

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.

References EOP E-1.3.
Step was: Sat: _____ Unsat _____*

1.2 2. Reset Safety Injection.

2.1

Reads~~notes~~ CAUTION~~S and NOTE~~ prior to Step 1.

2.2 Verifies Safety Injection is reset by noting PK08-21 is OFF or ESF equipment monitor red light is OFF.

Step was: Sat: _____ Unsat _____*

2.3 3. Reset both trains of Containment Isolation Phase A and B.

3.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Verifies Phase A red lights OFF. ~~reset.~~

3.2 Depresses Train A and B Phase B reset push buttons, verifies Phase B red lights OFF~~reset~~.

Step was: Sat: _____ Unsat _____*

3.3 4. Check ECCS status.

4.1

Verifies RHR Pps are stopped.

Step was: Sat: _____ Unsat _____*

4.2

5. Verify ASW and CCW are aligned for two pumps through two heat exchanger operation.

5.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Verifies both ASW pumps running, VB1 red lights ON.

5.2 Verifies FCV-602 open.

5.3 Verifies FCV-603 open.

5.4 Verifies FCV-430 open.

5.5 Verifies FCV-431, open.

5.6 Checks reciprocating charging pump. Stopped.

Step was: Sat: _____ Unsat _____*

5.7

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

6. Dispatches operator to close breakers.	Dispatches operator to close breakers for: 8976 (52-1H-20) 8980 (52-1F-31). *** **Cue: Operator dispatched.** *** **Step was: Sat: _____ Unsat _____***
6.1	6.2
7. ** Close 8716A and B, RHR discharge header crosstie valves.	
7.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Selects CLOSE on control switches for 8716A and B.

Step was: Sat: _____ Unsat _____*

7.2

8. ** Close 8700A and B, RHR pump 1 and 2 normal suction valves.

8.1

Positions control switches for valves 8700A and 8700B to CLOSE.

Step was: Sat: _____ Unsat _____*

8.2 9. ** Open 8982B, RHR pump 2 suction from containment recirculation sump.

9.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Cuts in series contactor for 8982B.

9.2 Selects OPEN on control switch for 8982B.

Step was: Sat: _____ Unsat _____*

9.3 10. Open FCV-364, RHR Heat exchange 2 CCW outlet valve.

10.1

Verifies FCV-364, is OPEN. (Red light ON)

~~10.2~~

~~10.3 Notes increase on CCW header B flow on FI-48~~

Step was: Sat: _____ Unsat _____*

10.4 11. Checks Containment Recirc Sump Level.

11.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Checks Containment Recirc Sump Level >92.5' on LI-940 & 941.

Step was: Sat: _____ Unsat _____*

11.2

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

12. ** Start RHR pump 12.

Note: Only substep 12.1 is critical.

12.1 Selects START on RHR pump 12 control switch.

12.2 Identifies failure of RHR pump 12 to start (overcurrent trip).

~~12.3 decreasing temperature of RHR heat exchanger 2 on TR-648 (temperature will initially increase).~~

~~**********~~

Step was: Sat: _____ Unsat _____*

12.4

13. ** Close 8974A and B, SI pump recirculation valves.

13.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Cuts in series contactor for 8974A and B.

13.2 Selects CLOSE on control switches for 8974A and B.

13.3 Verifies valves closed by green lights ON and red lights OFF. (Not critical)

13.4 GOES TO Step 7

Step was: Sat: _____ Unsat _____*

13.5 14. **Close 8105 and 8106, centrifugal charging pump recirculation valves.

14.1

Selects CLOSED on control switches for 8105 and 8106.

14.2 Verifies valves closed by green lights ON, and red lights OFF. (Not critical)

Step was: Sat: _____ Unsat _____*

14.3 15. ** Open 8807A and B, RHR heat exchanger 1 to SI pump 11.

15.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Selects OPEN on control switches for 8807A and B.

Step was: Sat: _____ Unsat _____*

15.2 16. Verify CCPs running

16.1

Checks centrifugal charging pumps 11 and 12 are running, red lights ON.

Step was: Sat: _____ Unsat _____*

16.2 17. Ensure RHR pump 2 motor current is maintained less than 57 amps.

17.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Determines RHR pump 12 is not running (No action required).

Step was: Sat: _____ Unsat _____*

17.2 18. Verify closed 8700A.

18.1

Verifies 8700A closed by green lights on red lights off.

Step was: Sat: _____ Unsat _____*

18.2 19. ** Open 8982A, RHR pump 1 suction from containment recirculation sump.

19.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Cuts in series contactor for 8982A.

19.2 Selects OPEN on control switch for 8982A.

Step was: Sat: _____ Unsat _____*

19.3 20. ** Open FCV-365, RHR Heat exchanger 1 CCW outlet valve.

20.1

Verifies FCV-365, is OPEN. (Red light ON)

~~20.2~~

~~20.3 Notes increase on CCW header B flow on FI-48~~

Step was: Sat: _____ Unsat _____*

20.4 21. ** Check RHR Pp 1-2 running.

21.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Determines RHR Pp 1-2 red light off and green light on.

21.2 GOES to Step 8f.

~~21.3~~

~~21.4 Notes increase on CCW header B flow on FI-48~~

Step was: Sat: _____ Unsat _____*

21.5

22. ** Start RHR pump 11.

Note: Only substep 22.1 is critical.

22.1 Selects START on RHR pump 11 control switch.

22.2 Checks flow to reactor vessel on FI-970 A/B.

22.3 Verifies pump not cavitating by checking motor amps.

~~22.4 decreasing temperature of RHR heat exchanger 2 on TR-648 (temperature will initially increase).~~

~~**********~~

Step was: Sat: _____ Unsat _____*

22.5

23. **Open 8804A, RHR heat exchanger 11 discharge to SI pump 2.

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Note: Only substep 23.1 is critical.

23.1 Selects OPEN on the control switch for 8804A.

23.2 Verifies SI pumps 11 and 12 running, red lights ON.

23.3 Ensure RHR pump 1 motor current is maintained less than 57 amps.

Step was: Sat: _____ Unsat _____*

23.4 24. ** Close RWST Suction Valves.

24.1 Closes 8805A & B, Charging Pp suction from RWST.

Note: If student asks, Breakers are closed for the following valves.

24.2 Closes 8976, SI Pp suction from RWST.

24.3 Closes 8980, RHR Pp suction from RWST.

Step was: Sat: _____ Unsat _____*

24.4

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 experienced a large break LOCA and RWST level decreased to less than 33%.
Initiating Cue:	The Shift Foreman directs you to align for cold leg recirculation, per EOP E-1.3 steps 1 through 9.
Task Standard:	RHR has been aligned to the suction of the SI pumps and CCPs for cold leg recirculation.

☐ Initialize the simulator to snap LJCNRC21 - "init LJCNRC21"

☐ Run Drill 5001

OR

☐ Type "init ljc027" on the expert screen command line. Click the BYPASS SWCK button on the expert screen to continue after control boards are aligned.

☐ Manually insert the following:

Command	Description
1. pmp rhr2 6,8,0,0,d,0 #orhp12	Fails RHR pump 1-2 when it is started.

~~☐ Load SNAP LJC027 from disk to a clear IC (or IC-79 to 82).~~

~~☐ Initialize the simulator to the selected IC.~~ This SNAP allows entry into EOP E-1.3 at Step 1. RWST level is 33% with both RHR pumps OFF.

☐ Inform the examiner that the simulator setup is complete.

NOTE: This JPM is time critical. Going to RUN too soon may affect the examinee's ability
to successfully complete this JPM.

☐ Go to RUN when the examinee references EOP E-1.3.

☐ When requested manually insert the following:

Command	Description
1. dsc sis14 act 1	Close breaker for 8976
2. dsc rhr4 act 1	Close breaker for 8980

~~After RUN, display CSF-1 on SPDS panel B.~~

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: LJPNRC-7

Title: TRANSFER PRESSURIZER HEATER GROUP 12 TO BACKUP POWER

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: OP A-4A:I, Pressurizer - Make Available, Rev 13A

Alternate Path: Yes No X

Time Critical: Yes No X

Time Allotment: 15 minutes

Critical Steps: 7, 9

Job Designation: RO/SRO

Task Number: 010A4.02

Rating: 3.6/3.4

AUTHOR:	DAVE BURNS	`	1/23/2000
REVIEWED BY:	N/A JPM COORDINATOR	DATE:	N/A
APPROVED BY:	N/A TRAINING LEADER	DATE:	N/A

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 in MODE 1. An electrical fault has deenergized 480VAC bus 13D. Offsite power is available.
Initiating Cue:	The Shift Foreman directs you to energize pressurizer heater group 12 from its backup power supply per OP A-4A:I, Section 6.3.
Task Standard:	The control room is notified that pressurizer heater group 12 has been transferred to the backup power supply.

Start Time:

Step	Expected Operator Actions
1.1	1. Place control switch for heater group 12 in the OFF position.

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator goes to or calls the control room to check the position of the control switch for heater group 12.

****

Cue: The control switch for heater group 12 is in the OFF position and the green light is ON.

****

Step was: Sat: _____ Unsat _____*

1.2 2. Verify that heater group 12 normal breaker 52-13D-6 is open.

2.1

Operator locates the normal breaker for heater group 12 on load center 13.

2.2 Verifies that the breaker is open.

****

Cue: Breaker is open.

****

Step was: Sat: _____ Unsat _____*

2.3 3. Place the DC control power switch for pressurizer heater group 12 normal breaker in the OFF position.

3.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator locates the DC control power switch for the heater group 12 normal breaker on load center 13.	Operator locates the heater group 12 backup breaker.
3.2 Places the control power switch in the OFF position.	4.2 Observes that the breaker is open.
Step was: Sat: _____ Unsat _____*	**Step was: Sat: _____ Unsat _____***
3.3 4. Check heater group 12 backup breaker 52-1G-72 open.	4.3 5. Check open the DC control power knife switch for the heater group 12 backup breaker.
4.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Note: The examinee should simulate this step. The cover should not be removed from the DC panel.

5.1 Operator locates the DC control power knife switch for heater group 12 (located above the vital breaker).

5.2 Verifies that the knife switch is open.

Step was: Sat: _____ Unsat _____*

5.3 6. Verify that both white potential lights on the manual transfer switch are not lit.

6.1 Operator locates the manual transfer switch on the wall next to the 52-1G-72 breaker.

Note: Since the normal breaker is available, a white light may be ON.

6.2 Observes that neither white light is ON.

****

Cue: Both lights are OFF.

****

Step was: Sat: _____ Unsat _____*

6.3 7. ** Move the transfer switch down to the backup (vital bus) position.

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Note: Cutting the seal is NOT actually performed. A sealed valve change form will not be needed.

7.1 Operator positions the switch to the backup supply.

Step was: Sat: _____ Unsat _____*

7.2

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

8. Check the heater group 12 backup breaker 52-1G-72 racked in.	Operator verifies that the heater group 12 backup breaker is racked in. **Step was: Sat: _____ Unsat _____***
8.1	
8.2	9. ** Close the DC control power knife switch for the heater group 12 backup breaker.
9.1	

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator locates the control power knife switch above 52-1G-72.	Operator locates the D.C. charging power switch on the lower front of 52-1G-72.
9.2 Places the knife switch in the CLOSE position.	10.2 Verifies the switch is on.
Step was: Sat: _____ Unsat _____*	**Step was: Sat: _____ Unsat _____***
9.3 10. Verify the D.C. charging power switch for heater group 13 backup breaker, 52-1G-72 is on.	10.3 11. Notify the control room of the status of heater group 12.
10.1	11.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator notifies the control room that heater group 12 has been transferred to the backup power supply.

Step was: Sat: _____ Unsat _____*

11.2

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 in MODE 1. An electrical fault has deenergized 480VAC bus 13D. Offsite power is available.
Initiating Cue:	The Shift Foreman directs you to energize pressurizer heater group 12 from its backup power supply per OP A-4A:I, Section 6.3.
Task Standard:	The control room is notified that pressurizer heater group 12 has been transferred to the backup power supply.

NUCLEAR POWER GENERATION
DIABLO CANYON POWER PLANT
JOB PERFORMANCE MEASURE

Number: LJPNRC-8

Title: CLOSE STEAM GENERATOR BLOWDOWN ISOLATION VALVES OUTSIDE CONTAINMENT

Examinee:

Evaluator:

	Print	Signature	Date

Results: Sat Unsat Total Time: minutes

Comments:

References: OP AP-8A, Control Room Inaccessibility - Establishing Hot Standby, Rev. 10

Alternate Path: Yes X No

Time Critical: Yes No X

Time Allotment: 10 minutes

Critical Steps: 2, 3

Job Designation: RO/SRO

Task Number: 035A2.04

Rating: 3.6/3.8

AUTHOR:	DAVE BURNS	DATE:	1/23/2000
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:	Adjustable Crescent Wrench
Initial Conditions:	Due to excessive smoke in the Control Room, Unit 1 is in MODE 3 and is being controlled from the Hot Shutdown Panel.
Initiating Cue:	You are directed by the Unit 1 Shift Foreman to check the position of the Unit 1 steam generator blowdown isolation valves outside containment and close, if necessary, in accordance with OP AP-8A, Step 23
Task Standard:	Verify the steam generator blowdown isolation valves outside containment are closed.

Start Time:

Step	Expected Operator Actions
1.1	1. Verify steam generator blowdown isolation and sample valves (O.C.) are closed.

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Operator locates and checks the position of steam generator blowdown sample isolation valves FCV-244, 246, 248 and 250.

****

Cue: Valves are open.

****

1.2 Locates and checks position of steam generator blowdown sample valves FCV-151, 154, 157 and 160.

****

Cue: Valves are open.

****

Step was: Sat: _____ Unsat _____*

1.2 2. ** Close the air supply valves to the steam generator blowdown isolation valves.

2.1

Operator locates and closes AIR-I-1-1295.

2.2 Locates and closes AIR-I-1-1301.

Step was: Sat: _____ Unsat _____*

2.3

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

3. ** Vent the air supply header to the steam generator blowdown isolation valves.	Operator locates and removes the vent caps from the vent valves on the isolated air headers.
3.1	3.2 Locates and opens AIR-I-1-1300.
	3.3 Locates and opens AIR-I-1-1306.
	********** **Cue: All the air has been vented off.** **********
	Step was: Sat: _____ Unsat _____* 3.4 4. Check steam generator blowdown isolation valves closed.
	4.1

*Denotes an entry required on the JPM cover sheet.
**Denotes a Critical Step.

Checks closed FCV-244, 246, 248 and 250.

****

Cue: Valves are closed.

****

4.2 Operator checks closed FCV-151, 154, 157 and 160.

****

Cue: Valves are closed.

****

Step was: Sat: _____ Unsat _____*

4.3

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: Due to excessive smoke in the Control Room, Unit 1 is in MODE 3 and is being controlled from the Hot Shutdown Panel.

Initiating Cue: You are directed by the Unit 1 Shift Foreman to check the position of the Unit 1 steam generator blowdown isolation valves outside containment and close, if necessary, in accordance with OP AP-8A, Step 23.

Task Standard: Verify the steam generator blowdown isolation valves outside containment are closed.