ES-301	Administrative Topics Outline	Form ES-301-1
Facility: **Calvert Cliffs 1 and 2**	Date of Examination:	**9/25/00**
Examination Level (circle one): **RO** / SRO	Operating Test Number:	**1**

Administrative Topic/Subject Description		Describe method of evaluation: 1. ONE Administrative JPM, OR 2. TWO Administrative Questions
A.1	Overtime limits	K/A 2.1.1 //3.7 Knowledge of overtime limits per admin procedure SE 1-101 "Use of Overtime"
		K/A 2.1.1 // 3.7 Knowledge of approval authority for overtime authorization
	Reactor Startup requirements	JPM K/A 2.1.20 // 4.3 Ability to execute procedure steps for Shut Down Margin Determination
A.2	Surveillance Testing	JPM K/A 2.2.1 // 3.7 Ability to perform pre-startup procedures (STP O-63-1 Remote Shutdown Instrumentation)
A.3	Radiation Control	K/A 2.3.4 // 2.5 Knowledge of radiation exposure limits and control
		K/A 2.3.1 // 2.6 Knowledge of 10CFR20 and related facility radiation control requirements
A.4	ERPIP	JPM K/A 2.4.43 // 2.8 demonstrate knowledge of emergency communications systems

Calvert Cliffs Nuclear Power Plant
ADMIN A1 Topics
Overtime limits

Knowledge of overtime limits

K/A 2.1.1 [3.7/X.X]

Question a:
Evaluate to following CRO Shift schedule to determine if it is in compliance with SE-1-101

Overtime limits:

	MON	TUE	WED	THU	FRI	SAT	SUN
Start	**6 AM**	**6 AM**	**6 AM**	**6 AM**	**OFF**	**OFF**	**6 PM**
Finish	**6 PM**	**6PM**	**10 PM**	**6 PM**	**OFF**	**OFF**	**6 AM**

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A1 Topics
Overtime limits

Knowledge of overtime limits

K/A 2.1.1 [3.7/X.X]

Question a:
Evaluate to following CRO Shift schedule to determine if it is in compliance with SE-1-101

Overtime limits:

	MON	TUE	WED	THU	FRI	SAT	SUN
Start	**6 AM**	**6 AM**	**6 AM**	**6 AM**	**OFF**	**OFF**	**6 PM**
Finish	**6 PM**	**6PM**	**10 PM**	**6 PM**	**OFF**	**OFF**	**6 AM**
	12 hours	**12 hours**	**16 hours**	**12 hours**	**0**	**0**	**12 hours**

This exceeds 24 hours in any 48 hour period on 10 AM Thursday

Limits: **>16 hours straight**
>16 hours in any 24 hour period
>24 hours in any 48 hour period
>72 hours in any 7 day period

Reference Use Allowed? NO

Reference 1 SE-1-101

Comments:

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A1 Topics
Overtime limits
Knowledge of approval authority for overtime authorization

K/A 2.1.1 [3.7/X.X]

Question b:
IF you are to exceed the overtime limits, whose approval is required and when must you get the approval?

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A1 Topics
Overtime limits
Knowledge of approval authority for overtime authorization

K/A 2.1.1 [3.7/X.X]

Question b:
IF you are to exceed the overtime limits, whose approval is required and when must you get the approval?

Answer:

1. Must be approved by GS-NPO
2. Attachment 1 from SE-1-101 must by filled out by the individual, justified and approved no more than 24 hours prior to exceeding the overtime limits.

Reference Use Allowed? NO

Reference 1 SE-1-101 Secvtion 5.2 E and G

Comments:

☐ Satisfactory ☐ Unsatisfactory Candidate _____

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

TASK: 022060501 Verify Shutdown Margin for existing plant conditions (Mode, Tave, CEA Status) per NEOP 301

JOB PERFORMANCE MEASURE

CALVERT CLIFFS NUCLEAR POWER PLANT

LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

TASK: 022060501 Verify Shutdown Margin for existing plant conditions (Mode, Tave, CEA Status) per NEOP 301

PERFORMER'S NAME: _____

APPLICABILITY:

RO and SRO

PREREQUISITES:

Completion of the knowledge requirement of the Initial License class training program for Nuclear Engineering Operating Procedures.

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ACTUAL PERFORMANCE _____DEMONSTRATE PERFORMANCE

ESTIMATED TIME TO COMPLETE JPM:	ACTUAL TIME TO COMPLETE JPM:	TIME CRITICAL TASK:
15 MINUTES	____ MINUTES	NO

TASK LEVEL:

LEVEL 1

TOOLS AND EQUIPMENT:

Blank copy of NEOP-301 Attachment 2

REFERENCE PROCEDURE(S):

NEOP-301
NEOP-13

TASK STANDARDS:

This JPM is complete when the status of core shutdown margin has been determined.

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

TASK: 022060501 Verify Shutdown Margin for existing plant conditions (Mode, Tave, CEA Status) per NEOP 301

DIRECTIONS TO EVALUATOR:

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

TASK: 022060501 Verify Shutdown Margin for existing plant conditions (Mode, Tave, CEA Status) per NEOP 301

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

ELEMENT (* = CRITICAL STEP)	STANDARD
TIME START_____	
____ Identify and locate NEOP-301.	Same as element.
____ Refer to NEOP-301 Section 6.2.	Determines that Step 6.2.A is to be performed.
6.2 SHUTDOWN MARGIN (ONE UNTRIPPLE CEA) MODES 3, 4 OR 5	

CUE: Provide a blank copy of Attachment 2 of NEOP-301.

NOTE: **Untrippable CEA(s) will have been determined by following the required actions of AOP-1B, CEA Malfunctions.**

1. **VERIFY AND DOCUMENT** on Attachment 2 within one hour after detection and at least once per 12 hours that:

CUE: If checked T_{AVE} = 532°F

• RCS average temperature (T_{avg}) is acceptable for current operating MODE.	Checks RCS average temperature and records it on attachment 2. Verifies temperature is acceptable for MODE 3.
*____ • RCS soluble boron concentration is greater than or equal to the Shutdown Boron Concentration required for the current burnup from Figure 1-II.A.4 of NEOP-13.	Refers to figure in NEOP-13 and determines that required boron is 1210.3 (Unit 1 cycle 14). Records the following data on ATTACHMENT 2: Required boron NEOP-13 figure used RCS boron concentration Completes the "Prepared BY" information and forwards the attachment to the CRS.

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

ELEMENT (* = CRITICAL STEP)	STANDARD

TIME STOP _____

TERMINATING CUE:	This JPM is complete when the status of core shutdown margin has been determined, recorded and reported to the CRS. No further actions are required.

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

TASK: 022060501 Verify Shutdown Margin for existing plant conditions (Mode, Tave, CEA Status) per NEOP 301

Document below any instances of failure to comply with industrial safety practices, radiation safety practices and use of event free tools.

COMMENTS:

_____

_____

The operator's performance was evaluated against the standards contained in this JPM and determined to be

SATISFACTORY UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ DATE: _____

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE

TASK: 022060501

DIRECTIONS TO TRAINEE:

1. To complete the task successfully, you must:

   - perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.

   - comply with industrial safety practices, radiation safety practices and use of event free tools.

2. Initial Conditions:

   a. Unit-1 has been shutdown to mode 3.

   b. While completing the CEA insertion, CEA #7, in shutdown Group B, stuck at about 100".

   c. The failure is mechanical and the CEA is determined untrippable.

   d. AOP-1B has been implemented.

   e. T_{AVE} is 532°F

   e. Core Burnup is 16,000 MWD/MTU.

   f. RCS boron concentration is 1310 ppm.

   g. You are performing the duties of the Unit-1 RO.

3. Initiating Cue: AOP-1B requires shutdown margin to be checked. The CRS directs you to verify and document that shutdown margin is adequate with the present plant conditions per the NEOPs. Are there any questions? You may begin.

Attachment 2,
Shutdown Margin Verification

Unit: _____ Cycle: _____

T_{avg} (°F)	MODE	Burnup (mwd/mtu)	CEA Position* (In/Out/PDIL)	Boron Grab Sample *** (ppm)	Required Boron Concentration (ppm)	Method of Verification (ECC+50/Figure)	Figure Used or Attachment & sequence #	Shutdown Margin Valid Until (date/time)	Prepared By Sign/Date/Time	Reviewed By (SRO) Sign/Date

*NOTE: Enter N/A when in MODE 6.
*** During Mode 6, this Boron Grab Sample is the minimum value of Refueling Pool or filled portion of RCS.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 022100502 Channel Check Remote Shutdown Instruments

JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 022100502 Channel Check Remote Shutdown Instruments

PERFORMER'S NAME: _____

APPLICABILITY:

RO and SRO

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME TO COMPLETE JPM:

10 MINUTES

TIME CRITICAL TASK:

NO

TOOLS AND EQUIPMENT:

None

REFERENCE PROCEDURE:

STP O-63-1

TASK STANDARDS:

This JPM is complete when administrative task 022100502 is completed per STP O-63-1, Remote Shutdown Instruments.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 022100502 Channel Check Remote Shutdown Instruments

DIRECTIONS TO EVALUATOR:

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)		STANDARD

TIME START____

CUE: Provide copy of STP O-63-1 to the candidate.
CUE: The CRS directs the performance of Sections 6.1 and 6.3 only for a PMT for 1C43 power supply replacements. Perform Section 6.1 first.

____ 6.1. REMOTE SHUTDOWN INSTRUMENTATION

CUE: Do not open 1C43 back panel.

____ A. **CHECK** 1C43 power supplies, upper and lower, indicating lights (4) energized. (located in 1C43 back panel) (N/A if performed in step 6.3.A)

Element is N/A

CUE: Reactor trip switchgear does not need to be checked.

____ B. **RECORD** the parameter readings listed in ATTACHMENT 1, REMOTE SHUTDOWN INSTRUMENTATION from the Remote Shutdown Monitoring Instrumentation panel 1C43, RPS WRNIs at 1C15, and the Reactor Trip Switchgear.

Records all data except Reactor Trip Switchgear.

NOTE: A Channel Check is defined by TS Bases 3.3.11.1

____ C. **PERFORM** a channel check by comparing each step's parameter recorded values to each other and verify that any channel deviation is within the Acceptance Criteria

Determines all values are SAT

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
____	D.	**DETEMINE** the operability of each step by circling SAT or UNSAT.	Same as element
____	E.	**IF** any 1C43 WRNI instrument is outside of the Acceptance Criteria when compared to the 1C15 WRNI instrument **THEN WRITE** an Issue Report. (N/A if all WRNI instruments are within Acceptance Criteria values)	Writes N/A in step

CUE: Proceed to Section 6.3

____ 6.3 POST ACCIDENT MONITORING INSTRUMENTATION AT THE REMOTE SHUTDOWN

____	A.	**CHECK** 1C43 power supplies, upper and lower, indicating lights (4) energized. (Located in 1C43 back panel) (N/A if performed in step 6.1.A)	Determines element is N/A
____	B	**RECORD** the parameter readings listed in ATTACHMENT 3, POST ACCIDENT MONITORING INSTRUMENTATION AT THEREMOTE SHUTDOWN PANEL AT 1C43.	Records data on Attachment 3

NOTE: **A Channel Check is defined by TS Bases 3.3.10.1**

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
____	C	**PERFORM** a channel check by comparing each step's parameter recorded values to each other and verify that any channel deviation is within the Acceptance Criteria.	Determines all values are SAT
____	D.	**IF** any instrument is outside of the Acceptance Criteria, **THEN WRITE** an Issue Report. (N/A if all instruments are within Acceptance Criteria values.)	Writes N/A in step
____	E	**COMPLETES** review of STP data and gives it to the CRS for SRO review (Section 6.4)	Same as element

TIME STOP _____

TERMINATING CUE:	This task is complete when Attachments 1 and 3 from STP O-63-1 are completed. No further actions are required.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 022100502 CHANNEL CHECK REMOTE S/D INSTRUMENTS

Document below any instances of failure to comply with industrial safety practices, radiation safety practices and use of event free tools

COMMENTS:

The operator's performance was evaluated against the standards contained in this JPM and determined to be

SATISFACTORY UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ DATE: _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK 022100502
DIRECTIONS TO TRAINEE:

1. To complete the task successfully, you must

   - perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.

   - comply with industrial safety practices, radiation safety practices and use of event free tools.

2. Initial Conditions:

   a. Unit 1 is at 100% power.

   b. Maintenance has been completed on the power supply replacement at 1C43.

   c. You are performing the duties of the Extra Licensed Operator.

3. Initiating Cue: The CRS has directed you to perform STP O-63-1 on the Instruments at 1C43 as a Post Maintenance Test. Are there any questions? You may begin.

CALVERT CLIFFS NUCLEAR POWER PLANT
SURVEILLANCE TEST PROCEDURE
UNIT ONE

STP O-63-1

REMOTE SHUTDOWN AND POST ACCIDENT MONITORING INSTR CHANNEL CHECK

REVISION 31

SAFETY RELATED

CONTINUOUS USE

Approval Authority: DJS 6/9/2000
Signature/Date

Effective Date: 6/8/00

SURVEILLANCE TEST PROCEDURES ADDITIONAL COVER SHEET INFORMATION

A. **Test Performance**

Permission to perform test: _____ / TODAY
Shift Manager Date

B. **Test completion, results review and approval** (Circle appropriate answer)

Accept. Criteria in spec?	YES NO N/A	Adjustments made?	YES NO N/A
As found results in spec?	YES NO N/A	IR submitted?	YES NO N/A
As left results in spec?	YES NO N/A	Malfunctions indicated?	YES NO N/A

REMARKS: _____

Test completed by: _____ / _____
Date

Analysis of results: _____

Shift Manager review: _____ / _____
Date

Analysis/Comments: _____

Functional Surveillance Test Coordinator: _____ Date: _____

EQSE (if required): _____ Date: _____

* POSRC Meeting No.: _____ Date: _____

* Plant General Manager: _____ Date: _____

* Required only if completed test on SR and designated NSR structures, systems and components (per Q List) identified a malfunction or were out of specification.

Attach a separate sheet, if necessary, to document additional comments.

TABLE OF CONTENTS

LIST OF EFFECTIVE PAGES

PAGE NUMBERS	REVISION
1-22	31

PROCEDURE ALTERATIONS

REVISION/CHANGE	PAGES
NONE	NONE

1.0 PURPOSE

A. This test verifies the operability of instrumentation, by channel check, that:

- Sufficient information available to permit facility shutdown and maintenance of Hot Standby conditions from outside the Control Room.
- Sufficient information available on selected plant parameters to monitor and assess these variables following an accident.

2.0 APPLICABILITY/SCOPE

A. Completion of this STP satisfies TS SR 3.3.10.1 and 3.3.11.1 for equipment tested.

B. This STP does not test the Hydrogen Monitors for TS SR 3.3.10.1.

C. Test Performance Requirements:

1. The sections of this STP may be performed in any order. Each step shall be initialed or circled immediately after it is completed and prior to performing the next step. Each step shall be initialed by either the licensed operator directing the STP or the operator performing the applicable step.

2. The 1/2 Decade is determined by taking the lowest meter reading times 3.16 and ensuring all other meter readings are within this value. Example: 7×10^{-3} % times 3.16 equals 2.2×10^{-2} %.

3. A CHANNEL CHECK is based on the assumption that indication channels monitoring the the same parameter should read approximately the same value. If the channel is off scale, then verify the channels are off scale in the same direction. Off-scale low current loop channels are verified to be reading at the bottom of the range and NOT failed down-scale. (Tech Spec Bases 3.3.10.1 and 3.3.11.1)

2.0 APPLICABILITY/SCOPE (Continued)

D. INDICATE the reason(s) for performing this STP:

☐ Scheduled Surveillance.

☐ Operability Verification.

☑ Post Maintenance Verification.
(Enter attachment/parameter to be performed in Pre-surveillance Remarks)

MO/IR numbers: 120000086

Pre-surveillance remarks:

PERFORM SECTIONS 6.1 AND 6.3 ONLY

ITEM 11 ON ATTACHMENT 1 IS N/A

Determination made by: _____ (SRO)

3.0 REFERENCES

A. Procedure

1. OI-1I, Reactor Vessel Level Monitoring System (RVLMS)
2. EN-4-104, Surveillance Test Program

B. Drawing

1. 61-101, sht 43D

C. Codes and Standards

1. Quality List (Q List)
2. Technical Manual 15-109-82, Heated Junction Thermocouple Electronics
3. Technical Specifications
4. UFSAR, Post-Accident Monitoring Instrumentation

4.0 PREREQUISITES

INITIALS

A. Plant is in EITHER Mode 1, 2, or 3 OR Mode 4, if preparations are being made to enter Mode 3.

B. Administrative Requirements:

1. **VERIFY** qualifications of test personnel.

2. **PERFORM** a pretest page check of this STP.

3. **DETERMINE** pretest briefing requirements: (check one)

☑ Pretest briefing NOT required.

☐ Pretest briefing required, surveillance and watch personnel have been briefed on procedures, precautions, and actions to be taken in the event an unexpected condition occurs.

Shift Manager

5.0 PRECAUTIONS

A. When an instrumentation channel does not meet the acceptance criteria, declare the channel inoperable and refer to the applicable Technical Specification for the appropriate action.

6.0 PERFORMANCE **INITIALS**

6.1 REMOTE SHUTDOWN INSTRUMENTATION

A. **CHECK** 1C43 power supplies, upper and lower, indicating lights (4) energized. (Located in 1C43 back panel) (N/A if performed in step 6.3.A) _____

B. **RECORD** the parameter readings listed in ATTACHMENT 1, REMOTE SHUTDOWN INSTRUMENTATION from the Remote Shutdown Monitoring Instrumentation panel 1C43, RPS WRNIs at 1C15, and the Reactor Trip Switchgear. _____

NOTE
A Channel Check is defined by TS Bases 3.3.11.1.

C. **PERFORM** a channel check by comparing each step's parameter recorded values to each other and verify that any channel deviation is within the Acceptance Criteria. _____

D. **DETERMINE** the operability of each step by circling SAT or UNSAT. _____

E. **IF** any 1C43 WRNI instrument is outside of the Acceptance Criteria when compared to the 1C15 WRNI instrument, **THEN WRITE** an Issue Report. (N/A if all WRNI instruments are within Acceptance Criteria values.) _____

6.2 POST-ACCIDENT MONITORING INSTRUMENTATION

A. **RECORD** the parameter readings listed in ATTACHMENT 2, POST-ACCIDENT INSTRUMENTATION from the Control Room and Heated Junction Thermocouple (HJTC) Panels. _____

NOTE
A Channel Check is defined by TS Bases 3.3.10.1.

B. **PERFORM** a channel check by comparing each step's parameter recorded values to each other, unless stated otherwise, and verify that any channel deviation is within the Acceptance Criteria. _____

C. **DETERMINE** the operability of each step by circling SAT or UNSAT. _____

6.3 POST ACCIDENT MONITORING INSTRUMENTATION AT THE REMOTE SHUTDOWN PANEL

INITIALS

A. **CHECK** 1C43 power supplies, upper and lower, indicating lights (4) energized. (Located in 1C43 back panel) (N/A if performed in step 6.1.A.) _____

B. **RECORD** the parameter readings listed in ATTACHMENT 3, POST ACCIDENT MONITORING INSTRUMENTATION AT THE REMOTE SHUTDOWN PANEL at 1C43. _____

NOTE
A Channel Check is defined by TS Bases 3.3.10.1.

C. **PERFORM** a channel check by comparing each step's parameter recorded values to each other and verify that any channel deviation is within the Acceptance Criteria. _____

D. IF any instrument is outside of the Acceptance Criteria, THEN **WRITE** an Issue Report. (N/A if all instruments are within Acceptance Criteria values.) _____

6.4 ACCEPTANCE CRITERIA

INITIALS

NOTE
Performance of this section constitutes a supervisory review. Actual observation of equipment response by the SRO performing this review is not required. Answering YES to a step signifies that the noted step has been completed and signed off by a qualified operator and that the actual equipment response is acceptable and valid.

A. Did all the instruments listed in ATTACHMENT 1 meet the Acceptance Criteria?

YES / NO (circle one) _____ SRO

B. Did all the instruments listed in ATTACHMENT 2 meet the Acceptance Criteria?

YES / NO (circle one) _____ SRO

C. This surveillance is considered satisfactory if YES was answered in all steps above.

SAT / UNSAT (circle one) _____ SRO

1. IF unsat,
   THEN notify the SM, declare the affected equipment inoperable and take actions as required by Technical Specifications and administrative actions stated in EN-4-104.

2. INITIATE an Issue Report for any equipment deficiencies.

7.0 POST PERFORMANCE ACTIVITIES

PERFORM a post test page verification of this surveillance.

8.0 BASES

[B0283]: Uncertainty Calculation for the Reactor Coolant System Temperature Indication/Recording Instrumentation Loops.

[B0285]: DELETED

[B0431]: TEMP ALT 1-OO-0038, CET 08, 22, and 42 are not installed for Unit 1 Cycle 15.

[B0433]: ES199502311, Uncertainty Calculation for Low Range Pressurizer Pressure Instrumentation Loops. (DCALC-CA00753)

[B0434]: ES199701033, Total Loop Uncertainty (TLU) for 12 CST.

[B0435]: ES199900558, Acceptance criteria for Channel Check of Containment Area Radiation High Range Monitors (1 & 2 RI 5217 A & B)

[B0436]: IR3-001-059, Identifies deficencies in the implementation of CET Operability Requirements. This includes the requirements of TS Amendments 148 (U-1) and 129 (U-2).

[B0438]: NRM memo NRM98183, P. S. Furio to D. L. Montana, PDMAU, dated 7/31/98, "Post-Accident Monitoring Instrumentation Surveillance Requirements".

[B0439]: SE memo, J. E. Kunzmann to D. L. Montana, PDMAU, dated 8/6/98, "RVLMS Testing per STP-O-63".

9.0 RECORDS

A. Records generated by this procedure shall be captured and controlled. Prior to transferring records for retention, legibility and completeness of the record shall be verified by the transmitting organization.

B. Maintain records as defined in EN-4-104, Surveillance Test Program.

ATTACHMENT 1

REMOTE SHUTDOWN INSTRUMENTATION

	PARAMETER	REMOTE SHUTDOWN INSTR (1C43)	ACCEPTANCE CRITERIA	CIRCLE ONE
1.	Reactor Power_____(Control Room narrow range) Mode_____			
2.	11 S/G LVL (1)	1-LI-1114B_____in. 1-LI-1114A_____in.	MAX DEV 25 in.	SAT / UNSAT
3.	11 S/G PRESS	1-PI-1013BB_____PSIA 1-PI-1013AA_____PSIA	MAX DEV 40 PSIA	SAT / UNSAT
4.	RCS Hot Leg TEMP (2)	1-TI-112HB_____°F 1-TI-112HA_____°F 1-TI-122HB_____°F 1-TI-122HA_____°F	MAX DEV 15°F	N/A
5.	RCS Cold Leg TEMP	1-TI-112CB_____°F 1-TI-112CA_____°F 1-TI-122CB_____°F 1-TI-122CA_____°F	MAX DEV 15°F	SAT / UNSAT
6.	PRZR LVL	1-LI-110Y_____in. 1-LI-110X_____in.	MAX DEV 10 in.	SAT / UNSAT
7.	PRZR PRESS	1-PI-105B_____PSIA 1-PI-105AA_____PSIA	MAX DEV 60 PSIA	SAT / UNSAT

(1) S/G LVL READINGS SHOULD BE TAKEN AT < 1% OR > 90% REACTOR POWER.

(2) NOT REQUIRED BY TECH SPECS. WHEN OUTSIDE OF ACCEPTANCE CRITERIA, WRITE AN ISSUE REPORT. THIS DOES NOT CONSTITUTE A FAILURE OF THE STP.

ATTACHMENT 1

REMOTE SHUTDOWN INSTRUMENTATION

	PARAMETER	REMOTE SHUTDOWN INSTR (1C43)	ACCEPTANCE CRITERIA	CIRCLE ONE
8.	RX WR POWER {3}	CH B_____ CH D_____	MAX DEV ½ Decade >10^{-4} % OR 2 Decades <10^{-4} %	SAT / UNSAT

(Use WRNI CH SEL 1-HS-015B to shift between Channels B and D) (Record values from either 1-NI-015 or 1-NI-016 depending on PWR LVL)

ENSURE all WRNI indications are on the same scale (CPS or %)

The data below is taken from the Control Room WRNI indication at 1C15 and are to be compared with the 1C43 WRNI indication.

	WR Log PWR (1C15) {2}{3}	CH B_____ CH D_____	MAX DEV with 1C43 WRNIs ½ Decade >10-4 % OR 2 Decades <10-4 %	N/A
9.	12 S/G LVL {1}	1-LI-1124B_____in. 1-LI-1124A_____in.	MAX DEV 25 in.	SAT / UNSAT
10.	12 S/G PRESS	1-PI-1023BB_____PSIA 1-PI-1023AA_____PSIA	MAX DEV 40 PSIA	SAT / UNSAT
11.	Reactor TCB Position Indication (Cable Spreading RM 306)	U-1 TCB-1 N/A U-1 TCB-2_____ U-1 TCB-3_____ U-1 TCB-4_____ U-1 TCB-5_____ U-1 TCB-6_____ U-1 TCB-7_____ U-1 TCB-8_____ U-1 TCB-9_____	Indicates OPEN or CLOSED	SAT / UNSAT

{1} S/G LVL READINGS SHOULD BE TAKEN AT < 1% OR > 90% REACTOR POWER.

{2} NOT REQUIRED BY TECH SPECS. WHEN OUTSIDE OF ACCEPTANCE CRITERIA, WRITE AN ISSUE REPORT. THIS DOES NOT CONSTITUTE A FAILURE OF THE STP.

{3} THE 1/2 DECADE IS DETERMINED BY TAKING THE LOWEST METER READING TIMES 3.16 AND ENSURING ALL OTHER METER READINGS ARE WITHIN THIS VALUE.

ATTACHMENT 2

POST-ACCIDENT INSTRUMENTATION

INITIALS

	PARAMETER	CONTROL ROOM INSTRUMENT	ACCEPTANCE CRITERIA	CIRCLE ONE
1.	Reactor Power_____(Control Room narrow range) Mode_____			
2.	11 S/G PRESS (1C03)	1-PI-1013A_____PSIA 1-PI-1013B_____PSIA 1-PI-1013C_____PSIA 1-PI-1013D_____PSIA	MAX DEV 40 PSIA	SAT / UNSAT
3.	12 S/G PRESS (1C03)	1-PI-1023A_____PSIA 1-PI-1023B_____PSIA 1-PI-1023C_____PSIA 1-PI-1023D_____PSIA	MAX DEV 40 PSIA	SAT / UNSAT
4.	11 S/G LVL (1) (1C04)	1-LR-1114D_____in. 1-LI-1114C_____in.	MAX DEV 12 in.	SAT / UNSAT
5.	12 S/G LVL (1) (1C04)	1-LR-1124D_____in. 1-LI-1124C_____in.	MAX DEV 12 in.	SAT / UNSAT
6.	PZR LOW RANGE PRESS (5) (1C06)	1-PI-103 _____PSI 1-PI-103-1 _____PSI	MAX DEV ±13 PSI [B0433]	SAT / UNSAT
7.	CONTAINMENT RADIATION (2)(2C24B)	1-RI-5317A_____R/HR 1-RI-5317B_____R/HR	READING ≤2 X 10^0 AND THE OPERATE LAMP IS LIT [B0435]	SAT / UNSAT

(1) S/G LVL READINGS SHOULD BE TAKEN AT < 1% OR > 90% REACTOR POWER.
(2) CONTAINMENT RADIATION MONITORS INDICATE SEPARATE AND DIFFERENT RADIATION FIELDS. A COMPARISON CHECK OF CHANNELS 1RI5317A & B SHOULD NOT BE PERFORMED. [B0435]
(5) PRESSURIZER LOW RANGE PRESSURE INDICATORS THAT ARE OUT OF RANGE HIGH, REQUIRE CHANNEL CHECKING THE INDICATORS IN ACCORDANCE WITH TS SR BASES 3.3.10.1.

ATTACHMENT 2

POST-ACCIDENT INSTRUMENTATION

	PARAMETER	CONTROL ROOM INSTRUMENT	ACCEPTANCE CRITERIA	INITIALS CIRCLE ONE
8.	WR Log PWR (1C05) (3)	1-JI-001_____ 1-JI-002_____ 1-JI-003_____ 1-JI-004_____	MAX DEV ½ Decade >10^{-4} % OR 2 Decades <10^{-4} %	SAT / UNSAT
	ENSURE all WRNI indications are on the same scale (CPS or %)			
9.	Subcooled Margin Monitor (1C05)	1-AI-11_____°F 1-AI-12_____°F (Ensure 1-HS-6411 and 1-HS-6412 selected to TEMP prior to recording values)	MAX DEV 10°F	SAT / UNSAT
10.	RCS Hot Leg TEMP (1C06)	1-TI-112H_____°F 1-TI-122H_____°F	MAX DEV 4°F [B0283]	SAT / UNSAT
11.	RCS Hot Leg TEMP (1C06)	1-TR-112 _____°F 1-TR-122 _____°F	MAX DEV 10°F [B0283]	SAT / UNSAT
12.	RCS Cold Leg TEMP (1C06)	1-TI-112C_____°F 1-TI-122C_____°F	MAX DEV 4°F [B0283]	SAT / UNSAT
13.	RCS Cold Leg TEMP (1C06)	1-TR-112 _____°F 1-TR-122 _____°F	MAX DEV 10°F [B0283]	SAT / UNSAT
14.	PRZR PRESS (1C06)	1-PI-105A_____PSIA 1-PR-105B_____PSIA	MAX DEV 60 PSIA	SAT / UNSAT
15.	PRZR LVL (1C06)	1-LI-110X-1_____in. 1-LI-110Y-1_____in.	MAX DEV 10 in.	SAT / UNSAT
16.	CNTMT PRESS (1C09) (4)	1-PI-5310_____PSIG 1-PI-5307_____PSIG 1-PI-5308_____PSIG	MAX DEV 2 PSIG	SAT / UNSAT
17.	WR CNTMT LVL (1C10)	1-LI-4147_____in. 1-LI-4146_____in.	MAX DEV 4 in.	SAT / UNSAT
18.	12 CST LVL (1C04)	1-LIA-5610_____FT. 1-LI-5611 _____FT.	MAX DEV 1.5 FT [B0434]	SAT / UNSAT

(3) THE 1/2 DECADE IS DETERMINED BY TAKING THE LOWEST METER READING TIMES 3.16 AND ENSURING ALL OTHER METER READINGS ARE WITHIN THIS VALUE.
(4) BOTH 1-PI-5307 AND 1-PI-5308 REQUIRED TO MEET 1 CHANNEL REQUIREMENT.

ATTACHMENT 2

POST-ACCIDENT INSTRUMENTATION

INITIALS

PARAMETER	CONTROL ROOM INSTRUMENT	ACCEPTANCE CRITERIA	CIRCLE ONE
19. Core Exit Thermocouples	(1C05)	[B0436]	

QUAD No. ONE

1-TI-112H_____°F
1-HS-132A (ZB)
T06_____(1)
T23_____(1)
T24_____(1)
T39_____(3)
T40_____(3)
T41_____(3)

1-HS-132C (ZA)
T07_____(1)
T25_____(2)
T26_____(1)
T27_____(1)
T42 N/A*___(3)
T43_____(2)

QUAD No. TWO

1-TI-122H_____°F
1-HS-132B (ZB)
T08 N/A*___
T09_____(1)
T28_____(1)
T29_____(1)
T30_____(2)
T44_____(3)

1-HS-132D (ZA)
T01_____(1)
T11_____(1)
T12_____(1)
T31_____(3)
T32_____(2)
T45_____(3)

(1) INTERIOR CETs
MAX TEMP DEV from
1-TI-112H AND
1-TI-122H is
plus 35°F or
minus 45°F

(2) PERIPHERAL CETs
MAX TEMP DEV from
1-TI-112H AND
1-TI-122H is
plus 35° or
minus 45°F

(3) SHROUD PERIPHERAL CETs
MAX TEMP DEV from
1-TI-112H AND
1-TI-122H is
plus 20° or
minus 55°F

*T08, 22, AND 42 ARE NOT INSTALLED PER TEMP. ALT. TA 1-00-0038 FOR UNIT 1 CYCLE 15 [B0431]

VERIFY at least ONE INTERIOR(1) AND ONE PERIPHERAL(2) OR (3) CET PER handswitch (ZA/ZB) meet the Acceptance Criteria to satisfy this step. SAT / UNSAT

For any CET deviating greater than acceptance criteria:
- INITIATE an IR
- REMOVE the CET from scan
- NOTIFY NFMU Reactor Engineer

ATTACHMENT 2

Page 4 of 8

POST-ACCIDENT INSTRUMENTATION

INITIALS

PARAMETER	CONTROL ROOM INSTRUMENT	ACCEPTANCE CRITERIA	CIRCLE ONE

19. Core Exit Thermocouples (1C05) (continued) [B0436]

QUAD No. THREE	QUAD No. FOUR	
1-TI-112H_____°F	1-TI-122H_____°F	
1-HS-131B (ZA)	1-HS-131A (ZA)	(1) INTERIOR CETs
T03_____(1)	T10_____(1)	MAX DEV from
T04_____(1)	T13_____(1)	1-TI-112H AND
T18_____(1)	T33_____(3)	1-TI-122H is
T19_____(1)	T34_____(3)	plus 35°F or
T20_____(2)	T35_____(3)	minus 45°F
T37_____(3)		
		(2) PERIPHERAL CETs
1-HS-131D (ZB)	1-HS-131C (ZB)	MAX DEV from
T05_____(1)	T02_____(1)	1-TI-112H AND
T21_____(3)	T14_____(1)	1-TI-122H is
T22 N/A* (2)	T15_____(1)	plus 35°F or
T38_____(3)	T16_____(1)	minus 45°F
	T17_____(1)	
	T36_____(2)	(3) SHROUD PERIPHERAL CETs
		MAX DEV from
		1-TI-112H AND
		1-TI-122H is
		plus 20°F or
		minus 55°F

*T08, 22, AND 42 ARE NOT INSTALLED PER TEMP. ALT. TA 1-00-0038 FOR UNIT 1 CYCLE 15 [B0431]

VERIFY at least ONE INTERIOR(1) AND ONE PERIPHERAL(2) OR (3) CET PER handswitch (ZA/ZB) meet the Acceptance Criteria to satisfy this step. SAT / UNSAT

For any CET deviating greater than acceptance criteria:
- INITIATE an IR
- REMOVE the CET from scan
- NOTIFY NFMU Reactor Engineer

ATTACHMENT 2

POST-ACCIDENT INSTRUMENTATION

INITIALS

20. Rx Vessel LVL (CAB 1C144A and 1C144B) **[B0439]**

> **NOTE**
> Jumpered unheated sensors are still considered operable.

a. **REVIEW** the RVLMS Operability Log, OI-1I Appendix 3, for any HJTC heated sensors that are jumpered out and, **WRITE** INOP for that HJTC ΔT in step 20.c. Acceptance Criteria. _____

b. **RECORD** the Delta-temperature (ΔT) of each unjumpered Heated Junction Thermocouple (HJTC) sensors in each channel as follows:

> **NOTE**
> To select Test 1, step 3 must be done immediately after step 2.

(1) **SET** the LEVEL/THOT pushbutton to LEVEL and wait five seconds. _____

(2) **DEPRESS** the LEVEL/THOT pushbutton five times in less than two seconds. (The right most decimal point will be blinking) _____

(3) **WHEN** the desired test number (shown in 20.c.) is displayed, **DEPRESS** the LEVEL/THOT pushbutton and the temperature will be displayed. (Record these temperatures in step 20.c. Acceptance Criteria) _____

(4) To read additional temperatures, **DEPRESS** the LEVEL/THOT pushbutton and repeat Step 3. _____

(5) **WHEN** all temperatures have been read, **DEPRESS** SYSTEM RESET pushbutton to exit the test mode. _____

ATTACHMENT 2

POST-ACCIDENT INSTRUMENTATION

INITIALS

c. ACCEPTANCE CRITERIA:

NOTE
A HJTC is considered operable if its ΔT is in the range of 25° to 200° F and its heated sensor is not jumpered out.

(1) CH A upper sensors (1C144A 27' SWGR)

ΔT1_____°F (Test 1)
ΔT2_____°F (Test 4)
ΔT3_____°F (Test 7)

CIRCLE ONE

(a) One or more of the upper three sensors operable. SAT / UNSAT

(2) CH A lower sensors (1C144A 27' SWGR)

ΔT4_____°F (Test 10)
ΔT5_____°F (Test 13)
ΔT6_____°F (Test 16)
ΔT7_____°F (Test 19)
ΔT8_____°F (Test 22)

(a) Three or more of the lower five sensors operable. SAT / UNSAT

(3) CH B upper sensors (1C144B 45' SWGR)

ΔT1_____°F (Test 1)
ΔT2_____°F (Test 4)
ΔT3_____°F (Test 7)

(a) One or more of the upper three sensors operable. SAT / UNSAT

(4) CH B lower sensors (1C144B 45' SWGR)

ΔT4_____°F (Test 10)
ΔT5_____°F (Test 13)
ΔT6_____°F (Test 16)
ΔT7_____°F (Test 19)
ΔT8_____°F (Test 22)

(a) Three or more of the lower five sensors operable. SAT / UNSAT

ATTACHMENT 2

POST-ACCIDENT INSTRUMENTATION

INITIALS

(5) CIRCLE ONE

(a) 1C06 "RVLMS TROUBLE CHANNEL A 1C144A" and "RVLMS TROUBLE CHANNEL B 1C144B" annunciator clear,

OR

(b) RVLMS PNL error codes E25 through E28 and E31 NOT displayed AND: Any other error codes displayed, evaluated NOT to INOP the RVLMS channel. SAT / UNSAT

ATTACHMENT 2

POST-ACCIDENT INSTRUMENTATION

INITIALS

21. Containment Isolation Valve Position

NOTE
For a containment isolation valve position indication to be operable, isolation valve status must be assured for each valve in a containment penetration flow path. ZL switches must function to provide accurate status to the Control Room of each isolation valve.

VERIFY each channel of control room containment isolation valve position indication is operable. {6} {7}

	CIRCLE ONE
1-CVC-515-CV	SAT / UNSAT
1-CVC-516-CV	SAT / UNSAT
1-CVC-505-CV	SAT / UNSAT
1-CVC-506-CV	SAT / UNSAT
1-WGS-2180-CV	SAT / UNSAT
1-WGS-2181-CV	SAT / UNSAT
1-CRM-5291-CV	SAT / UNSAT
1-CRM-5292-CV	SAT / UNSAT
1-HP-6900-MOV	SAT / UNSAT
1-HP-6901-MOV	SAT / UNSAT
1-IA-2080-MOV	SAT / UNSAT
1-CC-3832-CV	SAT / UNSAT
1-CC-3833-CV	SAT / UNSAT
1-RCW-4260-CV	SAT / UNSAT

{6} VERIFICATION OF VALVE POSITION INDICATION IS NOT REQUIRED FOR ISOLATION VALVES WHOSE ASSOCIATED PENETRATION IS ISOLATED BY AT LEAST ONE CLOSED AND DEACTIVATED AUTOMATIC VALVE, CLOSED MANUAL VALVE, CHECK VALVE WITH FLOW THROUGH THE VALVE SECURED, BLIND FLANGE, OR EQUIVALENT.

{7} ONLY ONE POSITION INDICATION CHANNEL IS REQUIRED FOR PENETRATION FLOW PATHS WITH ONLY ONE INSTALLED CONTROL ROOM INDICATION CHANNEL.

ATTACHMENT 3

POST ACCIDENT MONITORING INSTRUMENTATION AT THE REMOTE SHUTDOWN PANEL

	PARAMETER	PAM INSTRUMENTS AT 1C43	ACCEPTANCE CRITERIA	CIRCLE ONE
1.	12 CST LVL (1) (1C43) [B0438]	1-LI-5610A_____ft. 1-LI-5611A_____ft.	MAX DEV 1.5 ft. [B0434]	N/A

(1) NOT REQUIRED BY TECH SPECS. WHEN OUTSIDE OF ACCEPTANCE CRITERIA, WRITE AN ISSUE REPORT. THIS DOES NOT CONSTITUTE A FAILURE OF THE STP.

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control

Knowledge of radiation exposure limits

K/A 2.3.4 [2.5/3.1]

Question a:

What is the CCNPP Administrative Dose MAXIMUM limit for total dose equivalent (TEDE) that an Operator can receive as the TEDE-ALARA goal and the MAXIMUM CCNPP Administrative limit from all occupational sources?

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control
Knowledge of radiation exposure limits

K/A 2.3.4 [2.5/3.1]

Question a:

What is the CCNPP Administrative Dose MAXIMUM limit for total dose equivalent (TEDE) that an Operator can receive as the TEDE-ALARA goal and the MAXIMUM CCNPP Administrative limit from all occupational sources?

Answer:

1.5 REM (15 mSv) is the ALARA goal, whereas 4.0 REM (40 mSv) is the maximum administrative limit from all occupational sources

Reference Use Allowed? YES

Reference 1 RP-1-100 Table 1, page 22

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control

Knowledge of 10CFR 20 and related facility radiation control requirements
K/A 2.3.1 [2.6/3.0]

Question b:

What radiological restrictions, if any exist for workers in the RCA that have to climb to perform work?

Comments:

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control

Knowledge of 10CFR 20 and related facility radiation control requirements
K/A 2.3.1 [2.6/3.0]

Question b:

What radiological restrictions, if any, exist for workers in the RCA that have to climb to perform work?

Answer:

Workers are NOT to work in the overhead or any other area unless radiological surveys have been performed OR checked as specified in the SWP.

(Radiological signs and postings apply to general or specific areas up to 8 feet off the floor)

Reference Use Allowed? YES

Reference 1: RP-1-100 Section 5.2 .B Note

Comments:

☐ Satisfactory ☐ Unsatisfactory Candidate _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 010610402 Use of Dedicated Telephone per ERPIP 105

JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 010610402 Use of Dedicated Telephone per ERPIP 105

PERFORMER'S NAME: _____

APPLICABILITY:

PO and RO

PREREQUISITES:

Completion of the knowledge requirement of the Initial License class training program for Administrative Procedures.

EVALUATION LOCATION:

_____ PLANT __X___ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME TO COMPLETE JPM:	ACTUAL TIME TO COMPLETE JPM:	TIME CRITICAL TASK:
10 MINUTES	____ MINUTES	YES (15 Minutes)

TASK LEVEL:

TRAIN

TOOLS AND EQUIPMENT:

None

REFERENCE PROCEDURE(S):

ERPIP 105

TASK STANDARDS:

This JPM is complete when administrative task 010610402 is completed per ERPIP 105 for Initial Notification within 15 minutes of receiving the Initial Notification Form

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 010610402 Use of Dedicated Telephone per ERPIP 105

DIRECTIONS TO EVALUATOR:

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
TIME START _____			
CUE:			
____		Locate the ERPIP 105 procedure	Same as Element
____		Go to Attachment 1, OFFSITE AGENCY NOTIFICATIONS	Same as element
____	1.	**LIFT** receiver and **DEPRESS** "OFFSITE CONFERENCE"	Same as element
CUE: The simulator booth operator will answer the phone supplying the agency name and a person's name when requested.			
____	2.	As each agency answers, **SAY**, "This is Calvert Cliffs. Standby for an emergency message."	Same as element
___	3.	**REQUEST** agency name AND name of person.	Same as element
____	4.	**RECORD** name and time on form	Same as element
____	5.	**IF** no agencies answer, **THEN GO TO** step B.7 of this attachment. Separate calls must be made.	Determines this step is N/A
____	6.	After all agencies answer or about 2 minutes, **SAY**: a. "Please get an Initial Notification form". b. "I will wait for you to get the form.	Same as element

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
____	7.	After all agencies get the form or about 1 minute, **SAY**: a. I will give all information once then repeat it a second time b. If information is missed, please stay on the line and I will repeat what is missed.	Same as element
____	8.	**GIVE** all information from form. **REPEAT** all information once.	Same as element
____	9.	**ASK** each agency if full message was received. **PROVIDE** any missed information to respective agency. **IF** an agency does not answer this query, **THEN PRESUME** that all information is missed. **GO TO** next step of this attachment **AND MAKE** a separate agency call. **IF** all agencies answer this query. **THEN GO TO** step 8 of this attachment	Same as element
____	10.	**IF** separate calls must be made, **THEN DEPRESS** button for respective agency.	Determines this step is N/A
____	11.	MARK on form the method of contact for each agency	Marks on form "Dedicated"
CUE: The call to the NRC is not required.			
____	12.	"At the NRC Emergency Notification System"	Determines step is N/A

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)	STANDARD
____ 13. **SIGN** form	Signs form

TIME STOP _____

TERMINATING CUE:	This task is complete all Offsite agencies have been notified of the event. No further actions are required.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 010610402 Use of Dedicated Telephone per ERPIP 105

COMMENTS:

The operator's performance was evaluated against the standards contained in this JPM and determined to be

SATISFACTORY UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ DATE: _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK 010610402
DIRECTIONS TO TRAINEE:

1. To complete the task successfully, you must

   - perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.

   - comply with industrial safety practices, radiation safety practices and use of event free tools.

2. Initial Conditions:

   a. The ERPIP has been implemented.

   b. ERPIP 3.0 Attachment 3 Initial Notification Form has been completed by the Shift Manager

3. Initiating Cue: The Shift Manager has directed you to transmit the Initial Notification information to the Offsite agencies according to ERPIP 105, CONTROL ROOM COMMUNICATOR, OFFSITE AGENCY NOTIFICATIONS. Are there any questions? You may begin.

ATTACHMENT 3
INITIAL NOTIFICATION FORM

USE this form for initial notification and emergency class upgrading and downgrading only.

FORM instructions are on back.

1.	This is/is not an exercise. (circle one)	8.	Radioactivity: ☑ Has Not Been Released ☐ Is Being Released: ☐ From The Plant ☐ In The Plant ☐ Has Been Released: ☐ From The Plant ☐ In The Plant
2.	Name of Caller:		
3.	Title/Organization: BGE		
4.	Facility: CALVERT CLIFFS		
5.	Emergency Class: ☐ None ☑ Unusual Event ☐ Alert ☐ Site Emergency ☐ General Emergency	9.	Type of Release: ☑ None ☐ Airborne ☐ Waterborne ☐ Surface Spill
		10.	Population Affected: ☑ None ☐ Yes
6.	Time Declared: NOW Date: TODAY	11.	Protective Action Recommended (choose one only): ☑ None ☐ Shelter entire 10 mile EPZ ☐ Evacuate PAZ 1 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ ☐ Evacuate PAZ 1 & 3 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ ☐ Evacuate PAZ 1, 2, & 3 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ ☐ Evacuate PAZ 1 & 2 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ
7.	Nature of Incident: ☐ None Enter EAL Code (Q A 1) Circle EAL Number N/A 1 2 3 4 5 6 Enter two digit event code: (6 5)	12.	This is/is not an exercise. (circle one)

Site Emergency Coordinator signature: _____

NOTE

Maryland State Police receives calls for Maryland Emergency Management Agency until their offices are manned. Maryland Department of the Environment Security receives calls for Maryland Department of the Environment until their offices are manned.

	LOCATION	TIME	RECEIVED BY	DEDICATED PHONE	RADIO	OUTSIDE LINE
1.	CALVERT					(410-535-3491)
2.	ST. MARY'S					(301-475-8016)
3.	DORCHESTER					(410-228-2222)
4.	MEMA (or MSP)					(410-517-3600)
5.	MDE					(410-631-3937)
** NOTIFY the NRC immediately after the above agencies have been notified.**						
6.	NRC					(301-816-5100)

RECORD time all calls to above agencies were completed: _____

Communicator signature: _____

ES-301	Administrative Topics Outline	Form ES-301-1
Facility: **Calvert Cliffs 1 and 2**	Date of Examination:	**9/25/00**
Examination Level (circle one): RO / **SRO**	Operating Test Number:	**1**

Administrative Topic/Subject Description		Describe method of evaluation: 3. ONE Administrative JPM, OR 4. TWO Administrative Questions
A.1	Mode Change	JPM K/A 2.1.33 // 4.0 Ability to recognize entry level conditions for Technical Specifications
	Risk assessment	JPM K/A 2.1.20 // 4.2 Ability to execute procedure steps
A.2	Post Maintenance Testing	JPM K/A 2.2.21 // 3.5 Demonstrate knowledge of Post Maintenance operability requirements
A.3	Radiation Control	K/A 2.3.4 // 3.1 Knowledge of radiation exposure limits and control
		K/A 2.3.1 // 3.0 Knowledge of 10CFR20 and related facility radiation control requirements
A.4	Event Classification	JPM K/A 2.2.44 // 4.0 Demonstrate knowledge of emergency plan protective action recommendations

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032120201 Determine and Apply Tech Spec Requirements

JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032120201 Determine and Apply Tech Spec Requirements

PERFORMER'S NAME: _____

APPLICABILITY:

SRO

PREREQUISITES:

Completion of the knowledge requirement of the Initial License class training program for Administrative Procedures.

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME TO COMPLETE JPM:	ACTUAL TIME TO COMPLETE JPM:	TIME CRITICAL TASK:
10 MINUTES	____ MINUTES	NO

TASK LEVEL:

TRAIN

TOOLS AND EQUIPMENT:

CRO Log sheet

REFERENCE PROCEDURE(S):

Tech Spec

TASK STANDARDS:

This JPM is complete when administrative task 032120201 is completed per Tech Spec 3.5.1.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032120201 Determine and Apply Tech Spec Requirements

DIRECTIONS TO EVALUATOR:

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD

TIME START_____

CUE: Provide a copy of the CRO logs for the CRS review.

____	1.	Review the CRO log sheet for SIT data, page 5	Determines the readings for 12B SIT are out of spec

CUE: The readings for 12B SIT on the log are verified as accurate on 1C08.

____	2.	Verify the accuracy of the recorded readings on 1C08	Determines the readings for 12B SIT are accurate

NOTE: The candidate may direct the CRO to restore 12B SIT level and pressure per OI-3 while the Tech Specs are reviewed by the candidate.
CUE: Acknowledge the direction to restore 12B SIT level and pressure per OI-3

____	3.	Direct 12B SIT level and pressure to be restored per OI-3 while Tech Spec are reviewed.	Same as element

CUE: Acknowledge the direction to restore 12B SIT level and pressure within 1 hour.

____	4.	Review Tech Spec for 3.5.1, ECCS, Safety Injection Tanks	Determines that the LCO 3.5.1 Action B applies.
		LCO 3.5.1 Action B applies, Have 1 hour to restore 12B SIT level and pressure	Same as element
		Notify CRO that 12B SIT level and pressure must be restored within 1hour	Same as element

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)		STANDARD
____ 5.	Review LCO 3.5.1 Action C LCO 3.5.1 Action C will apply in 1 hour if the 12B SIT level and pressure are not restored • Be in Mode 3 in 6 hours • AND be in Mode 4 in the next 12 hours	Determines that the LCO Action C will require a Mode change Same as element

TIME STOP _____

TERMINATING CUE:	This task is complete when Tech Spec LCO 3.5.1 Action B and C are evaluated. No further actions are required.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: **032120201 DETERMINE AND APPLY TS REQUIREMENTS**

Document below any instances of failure to comply with industrial safety practices, radiation safety practices and use of event free tools

COMMENTS:

The operator's performance was evaluated against the standards contained in this JPM and determined to be

SATISFACTORY UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ DATE: _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK 032120201

DIRECTIONS TO TRAINEE:

1. To complete the task successfully, you must

   - perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.

   - comply with industrial safety practices, radiation safety practices and use of event free tools.

2. Initial Conditions:

   a. Unit 1 is at 100% power.

   b. The CRO has just informed you that SIT readings are out of spec.

   c. You are performing the duties of the CRS.

3. Initiating Cue: The CRO has informed you that the 12B SIT readings out of spec on his CRO logs. You are to evaluate the log readings for the SITs and determine the appropriate immediate corrective actions and subsequent actions if the corrective actions are unsuccessful. Are there any questions? You may begin.

CALVERT CLIFFS NUCLEAR POWER PLANT
UNIT ONE CONTROL ROOM OPERATOR LOGSHEET

DATE: TODAY @ 0600 TO TOMORROW @0600

U-1 SAFETY INJECTION TANK IN-LEAKAGE LOG

1. RECORD SIT LEVELS IN 0.25 INCH INCREMENTS
2. RECORD LEVELS AND COMPUTE POSITIVE CUMULATIVE LEVEL CHANGES FOR EACH TANK DURING 0800,1400, 2000, 0200 ROUNDS AND PRIOR TO EACH SIT FILL.
3. POSITIVE LEVEL CHANGES OCCURING AT TIMES OTHER THAN RECIRC/FILL OF ANY TANK SHALL BE ADDED TO THE CUMULATIVE TOTAL.
4. IF AN UNINTENTIONAL LEVEL CHANGE OF <0.4 INCHES OCCURS DURING RECIRC/FILL OF ANY TANK, ADD THAT VALUE TO CUMULATIVE TOTAL. IF THE UNINTENTIONAL LEVEL CHANGE IS >0.4 INCHES, ADD ONLY 0.4 INCHES TO THE CUMULATIVE TOTAL.
5. IF A TANK IS FILLED INTENTIONALLY, THAT LEVEL INCREASE SHOULD NOT BE ADDED TO THE CUMULATIVE TOTAL.
6. DISREGARD ANY NEGATIVE LEVEL CHANGES.
7. SAMPLE AND VERIFY BORON CONCENTRATION OF THE TANK WITHIN 24 HOURS AFTER THE CUMULATIVE TOTAL REACHES 10 INCHES.
8. ZERO THE CUMULATIVE TOTAL AFTER SAMPLING.
9. IF NARROW RANGE LEVEL INDICATOR IS OOS, USE WIDE RANGE INDICATION. IF USING WIDE RANGE INDICATION LEVEL MUST BE BETWEEN 190 AND 195 INCHES DUE TO LOOP UNCERTAINIES.
10. SIT LOGS ARE COVERED BY CONTROL ROOM LOG BASIS U1CR-128 THRU U1CR-139.
11. SIT PRESSURE IS ADMINISTRATIVELY CONTROLLED BETWEEN 200 AND 225 PSIG.
12. **SIT LEVEL SHALL BE > OR = TO 187 AND < OR = TO 199 INCHES. S.R. 3.5.1.2**
13. **SIT PRESSURE SHALL BE > OR = TO 200 AND < OR = 250 PSIG. S.R. 3.5.1.3**

11A SIT

TIME	PRESSURE PI-311A	LEVEL LI-311A	LEVEL CHANGE	CUMULATIVE TOTAL
CARRYOVER	218	196		0
0730	217	196	-	0
1400	217	196	-	0

11B SIT

TIME	PRESSURE PI-321A	LEVEL LI-321A	LEVEL CHANGE	CUMULATIVE TOTAL
CARRYOVER	215	196,25		,25
0730	214,5	196,25	-	,25
1400	214,5	196,25	-	,25

12A SIT

TIME	PRESSURE PI-331A	LEVEL LI-331A	LEVEL CHANGE	CUMULATIVE TOTAL
CARRYOVER	214,5	195,75		0
0730	213,5	195,5	-	0
1400	213	195,5	-	0

12B SIT

TIME	PRESSURE PI-341A	LEVEL LI-341A	LEVEL CHANGE	CUMULATIVE TOTAL
CARRYOVER	215	196,25		0
0730	214,5	195,0	-	0
1400	(198)	(186)	① -	0

① 12B SIT LEVEL AND PRESSURE OOS DUE TO VALVE LEAKAGE

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032040080 Complete/Review Risk Assessment worksheets

JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032040080 Complete/Review Risk Assessment worksheets

PERFORMER'S NAME: _____

APPLICABILITY:

SRO

PREREQUISITES:

Completion of the knowledge requirement of the Initial License class training program for Administrative Procedures.

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME TO COMPLETE JPM:	ACTUAL TIME TO COMPLETE JPM:	TIME CRITICAL TASK:
15 MINUTES	____ MINUTES	NO

TASK LEVEL:

TRAIN

TOOLS AND EQUIPMENT:

None

REFERENCE PROCEDURE(S):

NO 1-117

TASK STANDARDS:

This JPM is complete when administrative task 032040080 is completed per NO 1-117 attachment 5

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032040080 Complete/Review Risk Assessment worksheets

DIRECTIONS TO EVALUATOR:

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)		STANDARD
TIME START _____		
CUE:	Hand the candidate a copy of attachment 5 for risk assessment.	
____ 1.	Review Attachment 5	Determines that Part A is used to assess the schedule risk
CUE:	Hand the candidate a copy of the Integrated Work Schedule.	
____ 2.	Reviews Integrated Work Schedule	Determines STP O-7A-1 is scheduled, 12 CS pump conflicts with the STP performance Circles "YES" for A.1 for Unit 1
CUE:	Acknowledge the need to reschedule STP O-7A until 12 CS Pump is returned to service.	
____ 3.	**IF "YES", STOP and reschedule appropriate work activity or manager the risk using a Contingency Plan as a MEDIUM or HIGH Risk activity.**	Determines that the scheduled STP O-7A should be deferred until 12 CS pump is returned to service.
TIME STOP _____		
TERMINATING CUE:	This task is complete it is determined that STP O-7A has to be rescheduled. No further actions are required.	

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: **032040080 COMPLETE RISK ASSESSMENT WORKSHEETS**

Document below any instances of failure to comply with industrial safety practices, radiation safety practices and use of event free tools

COMMENTS:

The operator's performance was evaluated against the standards contained in this JPM and determined to be

SATISFACTORY UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ DATE: _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK 032040080

DIRECTIONS TO TRAINEE:

1. To complete the task successfully, you must

   - Perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.

   - Comply with industrial safety practices, radiation safety practices and use of event free tools.

2. Initial Conditions:

   a. Unit 1 is at 100% power.

   b. Work is in progress per the Integrated Work schedule. Today is Friday morning

   c. The CRS notifies you that 12 CS Pump has excessive seal leakage and has been placed in PTL and isolated.

   d. You are performing the duties of the OWC.

3. Initiating Cue: The Shift Manager has requested that you assess the schedule risk of 12 CS pump being OOS using Attachment 5 in NO 1-117. Are there any questions? You may begin.

ATTACHMENT 5, SCHEDULE RISK ASSESSMENT WORKSHEET FOR OPERATING UNITS (MODES 1, 2, & 3) (Page 1 of 6)

Section I. SCHEDULED WORK RISK ASSESSMENT	UNIT 1	UNIT 2
A. OPERATIONS		
1. Are there any daily work activities scheduled concurrently that could result in a more restrictive Tech Spec Action Statement or TRM requirements? **If "YES," STOP and reschedule appropriate work activity or manage the risk using a Contingency Plan as a MEDIUM or HIGH Risk activity.**	YES NO	YES NO
2. Are there any activities requiring Operations to place the plant in a non-standard lineup to support tagging equipment out-of-service to support work execution? Do any activities require a non-standard sequencing of tagging activities or multiple boundary modifications to support schedule work execution?	YES NO	YES NO
3. Could the activity potentially degrade containment integrity, e.g., planned containment entry) or degrade containment cooling capabilities? Example: Containment Spray System, Containment Air Coolers.	YES NO	YES NO
4. Activity places a system in a configuration that could result in an inadvertent or unplanned actual change in reactivity or change in indications used to monitor reactivity? (Refer to NO-2-100, Reactivity Management, for guidance on what components affect reactivity.) [B–5] If the answer is "YES" to ANY preceding question, the OWC is responsible for making the final risk determination.	YES NO	YES NO
B. RMGs		
1. Does the maintenance activity place an SSC in a configuration that would result in a unit trip or transient upon coincidental failure of a redundant system, train, or channel, e.g., RPS, ESFAS, or AFAS channel tripped and not bypassed, Condensate or Condensate Booster Pump removed from service? [B0465]	YES NO	YES NO
2. Would incorrect performance of the maintenance activity, including troubleshooting per MN-1-110, Troubleshooting and Procedure Controlled Activities, would result in a unit trip, or has the maintenance activity resulted in a Unit Trip, or Trip Near Miss in the past?	YES NO	YES NO
3. Would incorrect performance of the maintenance activity result in an unplanned unit transient, safety system actuation, or radiation release, or the maintenance activity has resulted in an unplanned Unit Transient in the past?	YES NO	YES NO

ATTACHMENT 5, SCHEDULE RISK ASSESSMENT WORKSHEET FOR OPERATING UNITS (MODES 1, 2, & 3) (Page 2 of 6)

Section I. SCHEDULED WORK RISK ASSESSMENT (Continued)	UNIT 1	UNIT 2
B. RMGs (Continued)		
4. For work activities being performed on a redundant system train or channel that is being depended on to support plant operation due to the other system or train being out-of-service (e.g., work on a condensate pump with another condensate pump out of service, or work on channel "A" RPS with another channel tripped, but not bypassed) this activity is Nuclear Safety HIGH Risk. **[B0458]** If the answer is "YES" to ANY preceding question, the RMGs are responsible for making the final risk determination.	YES NO HIGH	YES NO HIGH
5. Does the maintenance activity remove equipment from service important to generation or operational safety of the plant? <u>Example of Systems/Equipment</u> • Condensate or Condensate Booster Pumps • SGFPs and MFWCS • Circulating Water Pumps • Condenser Air Removal Units (Applicable only during May-Sept.) • EHC Pumps and Fluid System • Stator Liquid Cooling System (Applicable to Unit 1 only) • Feedwater Heater Level Control (11/21, 12/22, and 16/26) • Heater Drain Pumps • Main Turbine and Control • 120V Vital AC • CEDM MG Sets • Aux Steam Header • Swyd. Control House Equipment • 500KV High Lines	YES NO	YES NO
6. Will incorrect performance of the maintenance activity cause the loss of a 13KV, 4KV, or 480V Bus, an MCC Load Center, 1/2Y09 or 1/2Y10?	YES NO	YES NO
7. Are there any concurrent Risk Significant (MEDIUM or HIGH) Work activities scheduled in any of the following areas? • Auxiliary Feedwater Rooms • D/G Rooms (Safety-related Diesels) • 500 KV Switchyard, including the Switchyard Control House • Cable Spreading Room • 4KV Vital Buses, including Switchgear Rooms • 13KV Metal Clad Areas • 480V Buses • SGFPS • Control Room Panels	YES NO	YES NO

ATTACHMENT 5, SCHEDULE RISK ASSESSMENT WORKSHEET FOR OPERATING UNITS (MODES 1, 2, & 3) (Page 3 of 6)

Section I. SCHEDULED WORK RISK ASSESSMENT (Continued)	UNIT 1	UNIT 2
B. RMGs (Continued) 7. (Continued) If "YES," concurrent risk significant activities in these areas shall be rescheduled so that risk significant activities are not being conducted in more than one of these areas at any time, unless GS-NPO permission has been obtained and a Contingency Plan put in place. 8. Is the work activity System Outage Window (SOW) estimated to take greater than or equal to 50% of a Tech Spec Action Statement or TRM requirements. If the answer is "YES" to ANY preceding question during peak LMP or MEG, or during July 1st through September 1st, consider stopping and rescheduling the work activity, or consider managing the activity as Corporate High Risk. The RMGs are responsible for making the final risk determination.	YES NO	YES NO
C. RADIOLOGICAL RISK QUESTIONS 1. **Radiation Control Shift Supervisor** - Is there any RP HIGH/RP MEDIUM Risk Work scheduled during the Work week? 2. **Radiation Control Shift Supervisor/OWC**: Is there a potential for radiological conditions to exceed the limits for RP HIGH Risk approval level, or exceed the limits for RP MEDIUM Risk Work as defined in RP-1-102, Control of Radiation Protection Risk Significant Work, as a result of changing system line-ups in support of scheduled plant operations or while conducting other planned Work concurrently (example - work activities and operational evolutions are provided below)? Example Work Activities and Operational Evolutions √ Hydrogen peroxide injection (or any crud burst causing evolution) √ Initiating or changing letdown √ Changing charging pump line-up (e.g., 1 to 2 pump operation) √ Resin transfer (e.g., ion exchanger SRMT) √ Degassing primary system √ Plant start-up and shutdown √ Shutdown cooling operations √ Jobs involving cutting, welding, or grinding on potentially contaminated systems	YES NO YES NO	YES NO YES NO

ATTACHMENT 5, SCHEDULE RISK ASSESSMENT WORKSHEET FOR OPERATING UNITS (MODES 1, 2, & 3) (Page 4 of 6)

Section I. SCHEDULED WORK RISK ASSESSMENT (Continued)	UNIT 1	UNIT 2
C. RADIOLOGICAL RISK QUESTIONS (Continued) If "YES" to either C.1 or C.2, resolve schedule conflict and denote precautions for conducting Work safely and efficiently (e.g., avoiding concurrent performance of affected activities or evolutions) and the Radiological Risk Management Summary Table in RP-1-102. Include the completed Radiological Risk Management Summary Table from RP-1-102 with the POD.		
NOTE: **The LOW, MEDIUM and HIGH threshold values for PRA Risk or Trip Risk are set by GS-NPO.**		
D. PRA RISK QUESTIONS		
1. **REU** - Frequency of Core Damage posed by scheduled work activities.	LOW MED HIGH	LOW MED HIGH
2. **PES** - Work Activity will cause contribution to an "Unavailability Time" Maintenance Rule Performance Indicator that is in (a)(1) or such that the activity may cause the indicator to enter (a)(1).	YES NO	YES NO
3. Work activity will cause a contribution to an "unavailability time" NRC Performance Indicator, such that the activity may cause the indicator to approach or transition from Green to White, White to Yellow, or Yellow to Red. If "YES," to question 2 or 3, ensure <u>Attachment 3, Section 2, Requirements 14, 15, 16, and 17,</u> are evaluated for applicability to minimize unavailability time.	YES NO	YES NO
E. TRIP RISK QUESTION for REU		
1. Peak Unit Trip Risk posed by scheduled work activities. For High Trip Risk activities, OWC shall evaluate availability of equipment required for mitigation of a trip, unit shutdown, or recovery from a trip. For High Trip Risk Activities during peak LMP or MEG, or during July 1st through September 1st, reschedule the work activity, or manage the activity as Corporate High Risk.	LOW MED HIGH	LOW MED HIGH
F. TECH SPEC ACTION STATEMENT OR TRM REQUIREMENTS QUESTIONS		
1. **PES** - Risk of entering Tech Spec Action Statement or TRM requirements, which requires the unit to be shut down, inadvertently while setting prerequisite plant conditions for work activity. For identified Tech Spec Action Statement or TRM requirements equipment with a TSAS of 7 days or less, condition of redundant equipment tested to set prerequisite conditions shall be factored in to determine level of risk. (Equipment condition based on Plant Engineering System Report Card.)	LOW MED HIGH	LOW MED HIGH

ATTACHMENT 5, SCHEDULE RISK ASSESSMENT WORKSHEET FOR OPERATING UNITS (MODES 1, 2, & 3) (Page 5 of 6)

Section I. SCHEDULED WORK RISK ASSESSMENT (Continued)	UNIT 1	UNIT 2
F. TECH SPEC ACTION STATEMENT OR TRM REQUIREMENTS QUESTIONS (Continued)		
2. **PES** - Risk of work **activity** identifying equipment degradation requiring the unit to be shut down if the time frame of a Tech Spec Action Statement or TRM requirements is exceeded before restoring equipment to operable status. For identified Tech Spec Action Statement or TRM requirements equipment to be taken out-of-service with a TSAS of 7 days or less, condition of equipment shall be factored in to determine level of risk. (Equipment condition based on Plant Engineering System Report Card.) Considerations to manage the risk must include #28 on Attachment 3, Section 2.	LOW MED HIGH	LOW MED HIGH
3. **RMGs** - Risk of work **activity** exceeding time frame of Tech Spec Action Statement or TRM requirements. For work activities identified in answering 'YES' to question **B.8**, condition of equipment shall be factored in to determine level of risk. (Equipment condition based on Plant Engineering System Report Card.)	LOW MED HIGH	LOW MED HIGH
4. **OWC/WWC** – For work activities identified in answering "YES" to question **B.8**, if SOW is estimated to take ≥ 50% of a Tech Spec Action Statement or TRM requirements, the activity is MEDIUM Corporate Risk.	YES NO MED	YES NO MED
For work activities identified in answering "YES" to question **B.8**, if SOW is estimated to take ≥ 75% of a Tech Spec Action Statement or TRM requirements, the activity is High Corporate Risk. Considerations to manage the risk must include #28 on Attachment 3, Section 2.	YES NO HIGH	YES NO HIGH
G. OTHER UNIT CONSIDERATIONS. OPERATIONS / RMGS (OUTAGE MANAGEMENT - If the other unit is shut down.)		
1. Are there any scheduled activities on the other Unit that could conflict and result in a more restrictive Tech Spec Action Statement or TRM requirements on the assessed Unit?	YES NO	YES NO
2. Are there any work activities scheduled on the other Unit that could conflict with the requirements of the assessed Unit, e.g., Modes 1-3?	YES NO	YES NO

ATTACHMENT 5, SCHEDULE RISK ASSESSMENT WORKSHEET FOR OPERATING UNITS (MODES 1, 2, & 3) (Page 6 of 6)

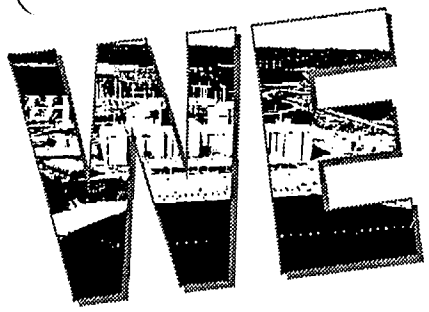
Section I. SCHEDULED WORK RISK ASSESSMENT (Continued)	UNIT 1	UNIT 2
H. WWC		
1. Are there other risk significant activities identified during maintenance order planning using Attachment 2 and Attachment 3 (or identified according to NO-1-102 or MN-1-117)? Document on Attachment 7 all requirements for each MEDIUM and HIGH Risk activity requiring compensatory actions. Refer to Attachment 3, Section 2.	YES NO	YES NO

Document on Attachment 7, Schedule Risk Assessment Summary Table, all requirements for each MEDIUM and HIGH Risk activity, or any LOW Risk activities requiring compensatory actions per the OWC, including verbal agreements in the Comments column. Refer to Section 2 of Attachment 3, Managing and Approving Risk Significant Work.

Section II. CONTINGENCY PLAN: RMG prepares as directed, OWC approves.

A. Document applicable contingencies using Attachment 7, Schedule Risk Assessment Summary Table, for each work activity.

1. Plan required for restoration of equipment, if determined that Tech Spec Action Statement or TRM requirements may be exceeded (MEDIUM or HIGH Risk).
2. Redundant equipment required to be tested before work evolution. (Designate equipment and test).
3. Redundant equipment required to be "Flagged-Off" during work evolution. (Designate equipment).
4. Lead RMG, Designated Lead Point of Contact (DLPC) for each shift.
5. Methods implemented to minimize risk.
   a. Provide alternate equipment function, e.g., installation of temporary diesel or air compressor.
   b. Minimize equipment OOS time.
6. Emergency Tech Spec Waiver.
7. Other Contingency actions (refer to Attachment 3, Section 2).



CALVERT CLIFFS NUCLEAR POWER PLANT

INTEGRATED WORK SCHEDULE

Work Week 0032

UNIT 1

Power:	100%
4 A.M. Load:	842 MWe Net
RCS Leak Rate:	.0612 GPM
Trip Risk:	Low
PRA Risk:	Low

UNIT 2

Power:	100%
4 A.M. Load:	841 MWe Net
RCS Leak Rate:	.2691 GPM
Trip Risk:	Low
PRA Risk:	Low

UNIT	HIGH RISK WORK	MO #	RISK CLASS
0	Remove Fill Head From Process Shield	0200000788	Radiological

UNIT	ACTION STATEMENT	50% LCO	EXPIRES	ECD

WWC: John Scaparro X-4325/Bpr # 2252
OWC: Tim Huber X-7367

RCSS: Bobby Holland X-2529/Bpr #0864
WCU-SRO: Kevin Umphrey X-4367/Bpr #1606

"We sometimes judge ourselves by what we feel we are capable of doing, but others judge us by what we have already done!"

QSS Week 32 Revision 2 Risk Evaluation

Evaluated on 8/3/2000 by Jeff Stone at extension 6510 or pager 0530.

The WWC is John Scaparro

	07-Aug-00 Monday	08-Aug-00 Tuesday	09-Aug-00 Wednesday	10-Aug-00 Thursday	11-Aug-00 Friday	12-Aug-00 Saturday	13-Aug-00 Sunday	Weekly Results	
Plant Trip Risk Level	*L*	*L*	*L*	*M*	*L*	*L*	*L*	*M*	
Peak Plant Trip Risk	*1.22*	*1.22*	*1.66*	*3.73*	*1.38*	*1.00*	*1.00*	*3.73*	Weekly Peak Trip Risk
Daily Risk Level	L	L	L	L	L	L	L	L	
Daily Peak Risk	1.03	1.03	1.33	2.34	1.15	1.00	1.00	2.34	Weekly Peak Risk
Daily Average Risk	1.01	1.01	1.08	1.08	1.02	1.00	1.00	1.03	Weekly Risk
Percent Daily Risk Increase	1%	1%	8%	8%	2%	0%	0%	3%	Average Percent Daily Risk Increase
Percent Annual Risk Increase	0.00%	0.00%	0.02%	0.02%	0.01%	0.00%	0.00%	0.06%	Percent Annual Risk Increase

The highest peak trip risk occurs on Thursday and is classified medium (3.73).
This lasts for approximately 1 hour during STP O-047A-1.

The highest peak risk occurs on Thursday and is classified low (2.34).
This lasts for approximately 1 hour during STP O-047A-1.

NOTE: THE PLANT TRIP RISK LEVEL THRESHOLDS ARE SET AS FOLLOWS:
0-2 X NORMAL: LOW
2-4 X NORMAL: MEDIUM
>4 X NORMAL: HIGH

THE PRA RISK LEVELS ARE SET AS FOLLOWS:
0-3 X NORMAL: LOW
3-10 X NORMAL: MEDIUM
>10 X NORMAL: HIGH

General Notes

Unit 2

QSS Week 32 Revision 2 Risk Evaluation

Evaluated on 8/3/2000 by Jeff Stone at extension 6510 or pager 0530.

The WWC is John Scaparro

	07-Aug-00 Monday	08-Aug-00 Tuesday	09-Aug-00 Wednesday	10-Aug-00 Thursday	11-Aug-00 Friday	12-Aug-00 Saturday	13-Aug-00 Sunday	Weekly Results	
Plant Trip Risk Level	*L*	*L*	*L*	*L*	*L*	*M*	*L*	*M*	
Peak Plant Trip Risk	*1.44*	*1.44*	*1.54*	*1.53*	*1.54*	*2.36*	*1.16*	*2.36*	Weekly Peak Trip Risk
Daily Risk Level	L	L	L	L	L	L	L	L	
Daily Peak Risk	1.06	1.06	1.44	1.08	1.15	1.18	1.08	1.44	Weekly Peak Risk
Daily Average Risk	1.06	1.06	1.13	1.06	1.03	1.03	1.00	1.05	Weekly Risk
Percent Daily Risk Increase	6%	6%	13%	6%	3%	3%	0%	5%	Average Percent Daily Risk Increase
Percent Annual Risk Increase	0.02%	0.02%	0.04%	0.02%	0.01%	0.01%	0.00%	0.10%	Percent Annual Risk Increase

The highest peak trip risk occurs on Saturday and is classified medium (2.36).
This lasts for approximately 4 hours during performance of STP O-029-2.

The highest peak risk occurs on Wednesday and is classified low (1.44).
This lasts for approximately 8 hours during rod movement for PSTP 04 and work on Condensate Booster Pump Mini-Flow CV.

NOTE: THE PLANT TRIP RISK LEVEL THRESHOLDS ARE SET AS FOLLOWS:
0-2 X NORMAL: LOW
2-4 X NORMAL: MEDIUM
>4 X NORMAL: HIGH

THE PRA RISK LEVELS ARE SET AS FOLLOWS:
0-3 X NORMAL: LOW
3-10 X NORMAL: MEDIUM
>10 X NORMAL: HIGH

General Notes

Integrated Risk Management

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

Attachment 5 √ Attachment 6 ☐ (Check One or Both, as applicable)

QSS Week **0032**

Day	Work Activity (System/Train/ Equipment)	Specific Affected Systems Equipment	System Outage Window (SOW) Duration	Applicable MO(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Req'd)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3,Section 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
MON THRU FRI	REPLACEMENT OF UNIT-1 & 2 TENDON CAPS	059	40	0199802008	MAJ	IMR [H.1]	N/A	1,10,30	RISK ASSOCIATED WITH CONFINED SPACE.
MON THRU FRI	REPAIR AUX BUILDING ROOF	102	40	0199900889	BNL	IMR [H.1]	N/A	1,10,30	RISK ASSOCIATED WITH ASBESTOS REMOVAL.
MON THRU FRI	12 WASTE NEUTRALIZING TANK RESTORATION	022	40	0199902433	MC	IMR [H.1]	N/A	1,10,30	RISK ASSOCIATED WITH CONFINED SPACE WORK.

7/31/00
WWC Signature and Date for pages 1 to 7

8-1-00
OWC Signature and Date for pages 1 to 7

8/3/00
GS-NPO Signature and Date for pages 1 to 7

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

Attachment 5 √ Attachment 6 ☐ (Check One or Both, as applicable)

QSS Week **0032**

Day	Work Activity (System/Train/ Equipment)	Specific Affected Systems Equipment	System Outage Window (SOW) Duration	Applicable MO(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Req'd)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3,Section 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
MON THRU FRI	SCAFFOLD BUILDING IN UNIT-1 45' & 27' SWGR RMS	032	40	1200002230	M2	NMR [H.1]	N/A	1,10,30	RISK ASSOCIATED WITH LOCATION NEAR TRIP SENSITIVE EQUIPMENT.
MON THRU THUR	UNIT-2 PSTP-04 SUPPORTING ROD MOVEMENT	064	86	N/A	OPS	NMR [A.4]	N/A	33	NMR ACTIVITIES CONTROLLED BY NO-1-102; CONDUCT OF INFREQUENT TEST OR EVOLUTIONS. CONSIDER R/S PSTP IF MEG OR LMP IS IN EFFECT.
MON	STP-O-073D-2 CHARGING PUMP PERFORMANCE	041	4	N/A	OPS	NMR [A.4 H.1]	3.5.2.A TRM 15.1.2.A	1, 10, 30	
MON	STP-O-073F-2 BORIC ACID PUMP PERFORMANCE	041	4	N/A	OPS	NMR [A.4 H.1]	3.5.2.A TRM 15.1.2.A	1, 10, 30	

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

Attachment 5 √ Attachment 6 ☐ (Check One or Both, as applicable)

QSS Week **0032**

Day	Work Activity (System/Train/ Equipment)	Specific Affected Systems Equipment	System Outage Window (SOW) Duration	Applicable MO(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Req'd)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3.Section 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
MON	U-2 RPS CH. 'A'; REPLACE TRIP TEST CABLE	058	19	2199802393	IM2	LOW	3.3.1	1,8,15,30	OI-30 TO BE PERFORMED JUST PRIOR TO MO PERFORMANCE.
TUES (PM)	OC DG PE-O-24-8-0-M	024	4	N/A	OPS	NMR [H.1]	N/A	1,8,10,30	CONSIDER R/S PE IF MEG OR LMP IS IN EFFECT.
WED THRU THUR	2-CVC-134; 21/22 IX SERIES STOP REPAIR	041	38	2200002003	FINM	IMR [H.1]	N/A	1,10,30	IMR ASSOCIATED WITH WORKING WITH A POTENTIAL EXPLOSIVE SYSTEM.
WED THRU THUR	2-CVC-135; 21 IX OUT SERIES/ PARALLEL STOP REPAIR	041	38	2200002350	FINM	IMR [H.1]	N/A	1,10,30	IMR ASSOCIATED WITH WORKING WITH A POTENTIAL EXPLOSIVE SYSTEM.
WED	CAL/CHECK 2PCV4070A & 2PCV4071A MS AIR REG	083	2	2200000237	IM2	IMR [H.1]	N/A	1,10,30	IMR ASSOCIATED WITH HEAT STRESS AREA; IF >115°F.
WED	INSPECT U-1 MN GEN EXCITATION EQ CHECKLIST	098	2	1200000735	EM1	NMR, IMR [B.2 H.1]	N/A	1,8,9,10,17,22, 32	IMR ASSOCIATED WITH WORKING WITH ENERGIZED EQUIPMENT UP TO 500 VOLTS. CONSIDER R/S CHECKLIST IF MEG OR LMP IS IN EFFECT.

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

Attachment 5 √ Attachment 6 ☐ (Check One or Both, as applicable)

QSS Week **0032**

Day	Work Activity (System/Train/ Equipment)	Specific Affected Systems Equipment	System Outage Window (SOW) Duration	Applicable MO(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Req'd)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3,Section 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
WED	STP-O-005A-1 AFW SYS TEST (11/13 AFW PP)	036	6	N/A	OPS	LOW [D.3]	3.7.3	1,15,17	MINIMIZE TESTING TIME TO REDUCE IMPACT TO THE NRC PERFORMANCE INDICATOR CRITERIA.
THUR	STP-O-005A-1 AFW SYS TEST (12 AFW PP)	036	3	N/A	OPS	LOW [D.3]	3.7.3	1,15,17	MINIMIZE TESTING TIME TO REDUCE IMPACT TO THE NRC PERFORMANCE INDICATOR CRITERIA.
THUR	23 CONDENSATE BOOSTER PUMP	044	14	2200000077 2200000089 2200000090 2200000091	M2 EM2 IM2	NMR [B.1 B.5]	N/A	1,8,10,15, 17,32	NO EXTENDED OOS. FLAG OFF #21 & #22 CONDENSATE BOOSTER PUMP AND BREAKERS. CONSIDER R/S MO'S IF MEG OR LMP IS IN EFFECT.
THUR	U-2 RPS CH. 'B'; REPLACE TRIP TEST CABLE	058	19	2199902366	IM2	LOW	3.3.1	1,8,15,30	OI-30 TO BE PERFORMED JUST PRIOR TO MO PERFORMANCE.
THUR (PM)	STP-O-087-1 BORATED WATER SOURCE	041	2	N/A	M1	NMR [A.4]	N/A	1,10,30	RISK IS ASSOCIATED WITH POSSIBLE LEAK-BY ON 1MOV514. MO# 1200002405 WILL REPAIR 1MOV514.

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

Attachment 5 √ Attachment 6 ☐ (Check One or Both, as applicable)

QSS Week **0032**

Day	Work Activity (System/Train/ Equipment)	Specific Affected Systems Equipment	System Outage Window (SOW) Duration	Applicable MO(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Req'd)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3.Section 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
THUR (PM)	1-93-7-O-W, TST MT MASTER TRIP SV'S	093	1	N/A	OPS	NMR [B.2 H.1]	N/A	1,8,9,10,32	SYSTEM OPERATOR BULK POWER APPROVAL REQUIRED. DO NOT PERFORM AT SAME TIME AS STP-O-047A-1. CONSIDER R/S PE IF MEG OR LMP IS IN EFFECT.
THUR (PM)	1-93-14-O-W, AUTO START OF EHC OIL	093	1	N/A	OPS	NMR [H.1]	N/A	1,8,9,10,32	SYSTEM OPERATOR BULK POWER APPROVAL REQUIRED. DO NOT PERFORM AT SAME TIME AS STP-O-047A-1.
THUR (PM)	1-93-15-O-W, OIL TRIP TEST MT	093	1	N/A	OPS	NMR [B.2 H.1]	N/A	1,8,9,10,32	SYSTEM OPERATOR BULK POWER APPROVAL REQUIRED. DO NOT PERFORM AT SAME TIME AS STP-O-047A-1. CONSIDER R/S PE IF MEG OR LMP IS IN EFFECT.

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

Attachment 5 √ Attachment 6 ☐ (Check One or Both, as applicable)

QSS Week **0032**

Day	Work Activity (System/Train/ Equipment)	Specific Affected Systems Equipment	System Outage Window (SOW) Duration	Applicable MO(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Req'd)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3.Section 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
THUR (PM)	1-93-16-O-W, TEST B/U OVSP TRIP CKT	093	1	N/A	OPS	NMR [H.1]	N/A	1,8,9,10,32	SYSTEM OPERATOR BULK POWER APPROVAL REQUIRED. DO NOT PERFORM AT SAME TIME AS STP-O-047A-1.
THUR (PM)	STP O-047A-1 11 & 12 MSIV 'A' CIRCUIT	083	1	N/A	OPS	NMR, IMR [B.1 B.2 B.3 E.1 H.1]	N/A	1,8,9,10,11,32	IMR ASSOCIATED WITH HEAT STRESS AREA; IF >115°F. DO NOT PERFORM AT SAME TIME AS UNIT-1 TURBINE PE(S).
FRI (AM)	STP O-007A-1 ('A' TRAIN ESFAS LOGIC TEST)	048	6	N/A	OPS	NMR [A.4 B.1 B.2 B.3 H.1]	3.6.6.A	1,8,9,10,32	CONSIDER R/S STP IF MEG OR LMP IS IN EFFECT.
FRI	STP-M-212E-2 (RPS MATRIX FUNCTIONAL TEST)	058	4	N/A	IM2	NMR [B.1]	N/A	1,10,17,18,19, 27,32	CONSIDER R/S STP IF MEG OR LMP IS IN EFFECT.
SAT (AM)	STP-O-029-2 (CEA PARTIAL MOVEMENT TEST)	055	4	N/A	OPS	NMR [A.4 B.2 E.1]	N/A	1,10,17,19,32	

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

Attachment 5 √ Attachment 6 ☐ (Check One or Both, as applicable)

QSS Week **0032**

Day	Work Activity (System/Train/ Equipment)	Specific Affected Systems Equipment	System Outage Window (SOW) Duration	Applicable MO(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Req'd)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3,Section 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
SAT (PM)	2-93-11-O-W, AUTO START OF MT OIL	093	1	N/A	OPS	NMR [H.1]	N/A	1,8,9,10,32	SYSTEM OPERATOR BULK POWER APPROVAL REQUIRED.
SAT (PM)	2-93-14-O-W, AUTO START OF EHC OIL	093	1	N/A	OPS	NMR [H.1]	N/A	1,8,9,10,32	SYSTEM OPERATOR BULK POWER APPROVAL REQUIRED.
SUN (PM)	STP-O-008A-2 (2A DG & 4KV BUS 21 LOCI SEQ TEST) monthly & quarterly SR.	024	4	N/A	OPS	NMR [B.1 B.2 B.3 B.6 H.1]	3.8.1.B	1,8,9,10,18,20, 21,22,32	NO TRIP SENSITIVE WORK IN SWITCHYARD OR 13KV METALCLAD. PERFORM STP-O-090-2 & OI-49 WITHIN 1 HR OF TAKING THE 2A DG OOS. CONSIDER R/S STP IF MEG OR LMP IS IN EFFECT.

ATTACHMENT 3, MANAGING AND APPROVING RISK SIGNIFICANT WORK
(Page 2 of 2)

Section 2. CONSIDERATIONS TO HELP MANAGE RISK SIGNIFICANT WORK [B0614]

Actions to Manage Risk Significant Work:

1. Perform a Pre-Job Brief, involving the LT/C, with participants performing the tasks and support personnel directly supporting performance of the Work.
2. Designated Lead Point of Contact (DLPC) assigned to coordinate performance of Work.
3. RGS shall attend the Pre-Job Brief.
4. Prepare Attachment 9, Planning and Approval of HIGH Risk Work.
5. Responsible Group General Supervisors and the applicable GS according to Attachment 3, Section 1, shall approve the Work plan and action to manage the risk.
6. Prepare Attachment 4, Post-Job Review for HIGH Risk Work, or similar form.
7. RGSs are to provide field supervisory monitoring of the HIGH Risk activities, as determined by the approval General Supervisors.
8. Schedule the Work in the Integrated Site Schedule and distribute as part of the POD.
9. A procedure, instruction or Maintenance Order shall be used to control the conduct of the Work.
10. Provide field supervisory monitoring of the Work (job coverage) as determined by the RGS for MEDIUM Risk Work.
11. Provide temporary barriers for transient trip sensitive risk areas as determined by the on-shift Operations Shift Manager or CRS.
12. System Outage Window (SOW) time NOT to exceed 48 hours.
13. System Manager or Alternate available on site for job coverage.
14. Two-shift coverage required.
15. "Round-the-Clock" coverage required.
16. Special coordination for equipment tagging required.
17. Parts and materials for maintenance to be pre-staged.
18. GS-NPO approval required for Work plan and compensatory measures.
19. Tagout and work activity walked down.
20. Switchyard Control House off limits for any other Risk Significant Work activities.
21. No Work shall be performed (approved) on redundant safety-related equipment at the same time, unless approved by GS-NPO.
22. Review applicable industry operating experience prior to job execution.
23. Task-experienced workers selected to perform Work.
24. Mock-up and rehearsal or other special training is required to perform the Work.
25. Develop a response plan for personnel injury.
26. Conduct Integrated Team Planning Meeting.
27. Perform an Integrated Pre-Job Brief, involving the DLPC, RGSs, LT/C, participants performing the tasks.
28. Provide a plan for restoration of equipment if it is determined that the Tech Spec Action Statement or TRM requirements frame will be exceeded.
29. Other applicable requirements to manage the risk of Work as determined by the approval authorities.
30. RGS shall consider the use of Peer Checks.
31. Project schedule reviewed by RGS and OWC.
32. Use of peer checks is mandatory.
33. Action to manage activity identified according to NO-1-102.
34. Action to manage activity identified according to NO-1-103.
35. Action to manage activity identified according to MN-1-117.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032040506 Determine post maintenance testing of pumps and valves

JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032040506 Determine post maintenance testing of pumps and valves

PERFORMER'S NAME: _____

APPLICABILITY:

SRO

PREREQUISITES:

Completion of the knowledge requirement of the Initial License class training program for Administrative Procedures.

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME TO COMPLETE JPM:	ACTUAL TIME TO COMPLETE JPM:	TIME CRITICAL TASK:
15 MINUTES	____ MINUTES	NO

TASK LEVEL:

TRAIN

TOOLS AND EQUIPMENT:

None

REFERENCE PROCEDURE(S):

NO 1-208

TASK STANDARDS:

This JPM is complete when administrative task 032040506s completed per NO 1-208.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032040506 Determine post maintenance testing of pumps and valves

DIRECTIONS TO EVALUATOR:

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
TIME START _____			
____	1.	Locate NO 1-208	Same as element
____	2.	Review Attachment 3, Standard Testing recommendations, to determine the recommended PMOT	Determines 12 LPSI pump is a Safety Related pump Determines 12 LPSI pump has a mechanical seal Determines the operability test for mechanical seal disassembly, is the appropriate STP to measure vibration and pump head/flow

NOTE: The candidate should use the EPM information system to determine the STP for 12 LPSI pump.

____	4.	Access EPM to determine appropriate STP for test of 12 LPSI pump	Determines that STP O-73J-1 is used as the specified PMOT

TIME STOP _____

TERMINATING CUE: This task is complete when the specified PMOT is identified as STP O-73J-1 for 12 LPSI pump. No further actions are required.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032040506 Determine PMT of pumps and valves

Document below any instances of failure to comply with industrial safety practices, radiation safety practices and use of event free tools.

COMMENTS

The operator's performance was evaluated against the standards contained in this JPM and determined to be

SATISFACTORY UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ DATE: _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK 032040506
DIRECTIONS TO TRAINEE:

1. To complete the task successfully, you must

   - Perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.

   - Comply with industrial safety practices, radiation safety practices and use of event free tools

2. Initial Conditions:

   a. Unit 1 is at 100% power.

   b. The CRS notifies you that 12 LPSI pump has been isolated due to excessive shaft seal leakage. The seal repair and re-assembly is estimated to take about 12 hours.

   c. You are performing the duties of the OWC.

3. Initiating Cue: The Shift Manager has requested that you determine the Post Maintenance Operability Test per attachment 3 in NO-1-208 and any applicable test procedure. Are there any questions? You may begin.

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control

Knowledge of radiation exposure limits

K/A 2.3.4 [2.5/3.1]

Question a:

What is the CCNPP Administrative Dose MAXIMUM limit for total dose equivalent (TEDE) that an Operator can receive as the TEDE-ALARA goal and the MAXIMUM CCNPP Administrative limit from all occupational sources?

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control
Knowledge of radiation exposure limits

K/A 2.3.4 [2.5/3.1]

Question a:

What is the CCNPP Administrative Dose MAXIMUM limit for total dose equivalent (TEDE) that an Operator can receive as the TEDE-ALARA goal and the MAXIMUM CCNPP Administrative limit from all occupational sources?

Answer:

1.5 REM (15 mSv) is the ALARA goal, whereas 4.0 REM (40 mSv) is the maximum administrative limit from all occupational sources

Reference Use Allowed? YES

Reference 1 RP-1-100 Table 1, page 22

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control

Knowledge of 10CFR 20 and related facility radiation control requirements
K/A 2.3.1 [2.6/3.0]

Question b:

What radiological restrictions, if any exist for workers in the RCA that have to climb to perform work?

Comments:

☐ Satisfactory ☐ Unsatisfactory Candidate _____

Calvert Cliffs Nuclear Power Plant
ADMIN A3 Topics
Radiation Control

Knowledge of 10CFR 20 and related facility radiation control requirements
K/A 2.3.1 [2.6/3.0]

Question b:

What radiological restrictions, if any, exist for workers in the RCA that have to climb to perform work?

Answer:

Workers are NOT to work in the overhead or any other area unless radiological surveys have been performed OR checked as specified in the SWP.

(Radiological signs and postings apply to general or specific areas up to 8 feet off the floor)

Reference Use Allowed? YES

Reference 1: RP-1-100 Section 5.2 .B Note

Comments:

☐ Satisfactory ☐ Unsatisfactory Candidate _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032170415 Determine appropriate emergency response actions per the ERPIP while maintaining an overview of plant conditions

JOB PERFORMANCE MEASURE

CALVERT CLIFFS NUCLEAR POWER PLANT

LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032170415 Determine appropriate emergency response actions per the ERPIP while maintaining an overview of plant conditions

PERFORMER'S NAME: _____

APPLICABILITY:

SRO

PREREQUISITES:

Completion of the knowledge requirement of the Initial License class training program for Emergency Response Plan Implementation Procedures.

EVALUATION LOCATION:

SIMULATOR

EVALUATION METHOD:

ACTUAL PERFORMANCE

ESTIMATED TIME TO COMPLETE JPM:

10 MINUTES

TIME CRITICAL TASK:

NO

TASK LEVEL:

LEVEL 1

TOOLS AND EQUIPMENT:

Blank copy of ERPIP 3.0 Attachment 3, Initial Notification Form, DRDT screen, Emergency Response Sector Map

REFERENCE PROCEDURE(S):

ERPIP 3.0

TASK STANDARDS:

This JPM is complete when an EAL classification is determined based on given plant conditions, initial notification form completed, and on-site notification made.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032170415 Determine appropriate emergency response actions per the ERPIP while maintaining an overview of plant conditions

DIRECTIONS TO EVALUATOR:

None

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)		STANDARD
TIME START____		
____ 1.	Identify and locate ERPIP.	Same as element.
____ 2.	Refers to Immediate Actions and identifies the appropriate category from the listing and go to the appropriate Attachment.	Selects and goes to attachment 2, Emergency Classification.

ATTACHMENT 2 EMERGENCY CLASSIFICATION

A. CLASSIFY THE EMERGENCY

NOTE: The decision to classify an emergency may **NOT** be delegated.

*____ 1.0	**EVALUATE** conditions against Attachment 1, Emergency Action Level (EAL) criteria.	Determines a GENERAL EMERGENCY classification is warranted under FISSION PRODUCT BARRIER DEGRADATION, based on 3/3 barriers affected with a loss of at least 2 barriers. (Fuel Clad Barrier-Radiation, coolant activity greater than 600 µci/cc, RCS Barrier-Safety Function Status/Functional Recovery, EOP-8 implemented from EOP-6, Cntmt Barrier-Coolant Leakage, Steam Generator Tube Rupture in progress and unexpected/uncontrolled release to the environment from the affected Steam Generator for greater than 15 minutes).

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
B.	**IMPLEMENT EMERGENCY RESPONSE PLAN ACTIONS (ATTACHMENT 2)**		
_____	1.0	**IF** an EAL is satisfied **THEN OBTAIN** an Initial Notification form (Attachment 3 to this procedure). **GO TO** the respective classification tab.	Determines Attachment 4 is applicable.

CUE: Provide examinee with a copy of ERPIP 3.0 Attachments 3 and 4, Initial Notification

NOTE TO EVALUATOR: ***This attachment 3 is your copy to follow the operator's actions during this JPM.***

ATTACHMENT 3 INITIAL NOTIFICATION

____	1.	Complete Item 1.	Circles "is not" in Item 1.
____	2.	Complete Item 2.	Inserts name in Item 2.
*____	3.	Complete Item 5.	Checks "General Emergency" in Item 5.
*____	4.	Complete Item 7.	Enters EAL code and circles EAL number in Item 7.
*____	5.	Complete Item 8.	Checks "Is Being Released" and "From the Plant".
*____	6.	Complete Item 9.	Checks "Airborne".
*____	7.	Complete Item 10.	Checks "YES" in Item 10.
*____	8.	Complete Item 11.	Checks evacuate PAZ 1 & 3 unless conditions makes evacuation dangerous and shelter remainder of 10 miles EPZ.
____	9.	Complete Item 12.	Circles "is not" in Item 12.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
____	10.	Complete Item 6.	Enter "Time" and "Date".
____	11.	Sign initial notification form.	Enters signature in I.B.
A.		**COMPLETE THE INITIAL NOTIFICATION FORM (ATTACHMENT 4 GENERAL EMERGENCY)**	
____	1.0	**COMPLETE** Initial Notification form (Attachment 3) as follows (items not mentioned are self-explanatory).	Obtains Attachment 3 from the evaluator or the "Extra Forms" book.
____		a. Item 6, Time Declared: complete this last.	No action required.
____		b. Item 7, Nature of Incident:	
		NOTE EAL code and number and event code are from ERPIP 3.0, Attachment 1, EALs, Page 1 Enter EAL code Circle EAL number Enter two digit event code	Chooses and records BG1 Fission Product Barrier Degradation on Attachment 3. Circles N/A for number and enters 59 for two digit event code.
____		c. Item 8, Radioactivity: radioactivity is being/has been released if any of the following conditions are/have been met:	Determines Radioactivity is Being released
____		(1) the release flowpath monitor is/was in alarm	
____		(2) the release is/was greater than Technical Spec limits	
		(3) the release is/was accidental	
____		d. Item 10, Population Affected: check "YES".	No action required.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
____	e.	Item 11, Protective Actions Recommended: select a protective action from Attachment 5, Prompt Protective Action Recommendation.	Refers to Attachment 5.

ATTACHMENT 5 PROTECTIVE ACTION RECOMMENDATION

A. SELECT A PROTECTIVE ACTION RECOMMENDATION

NOTE: A prompt protective action recommendation must be made for General Emergency.

CUE: The release rate is 2.7E5 μci /second.

_____ 1.0 **IF** a release exists and **ALL** of the following conditions are met: — Determines step is N/A.

a. A controlled release from Containment is to be commenced less than 2 hours and there is assurance that the release will be a short term puff release lasting no more than 2 hours

THEN make the following Protective Action Recommendation:

"Shelter entire 10 mile EPZ"

NOTE: Page 2 of this attachment may be used to determine which zone(s) number(s) to put in the parenthesis.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
CUE: When DRDT screen checked, DIR60 is 340°F.			
*___	1.1	**IF** the criteria of A.1.0 are not satisfied **THEN** make the following Protective Action Recommendation:	Determines that step is applicable.
		"Evacuate [select one] (PAZ 1) (PAZ 1 & 3) (PAZ 1, 2, & 3) (PAZ 1 & 2) unless conditions make evacuation dangerous, and shelter remainder of 10 mile EPZ."	Selects PAZ 1 & 3.

ATTACHMENT 4 (GENERAL EMERGENCY)

B. HAVE THE INITIAL NOTIFICATION TRANSMITTED

*____	1.0	**DIRECT** the Control Room Communicator to transmit the Initial Notification information to the offsite agencies in accordance with ERPIP 105, Control Room Communicator, OFFSITE AGENCY NOTIFICATIONS.	Directions given.

C. NOTIFY ONSITE PERSONNEL

A. NOTIFY ONSITE PERSONNEL

	1.0	Direct the Control Room Communicator to perform the following:	
____	a.	**SOUND** the emergency PA alarm for 5 seconds.	Sounds alarm for 5 seconds.
____	b.	**ANNOUNCE** "A GENERAL EMERGENCY exists." Give EAL category. IF site assembly has not been done **THEN**	Makes the following announcement: A general emergency exists under fission product barrier degradation. All personnel report to your assembly area

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)	STANDARD
ANNOUNCE "All personnel report to your assembly area immediately".	immediately.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

ELEMENT (* = CRITICAL STEP)			STANDARD
____	c.	**REPEAT** step C.1.0.a and C.1.0.b of this attachment once.	Sounds alarm for 5 seconds. Makes the following announcement: "A GENERAL EMERGENCY exists for Fission Product Barrier Degradation. All personnel report to your assembly area immediately."

TIME STOP _____

TERMINATING CUE:	This JPM is complete when an EAL classification is determined based on given plant conditions, initial notification form completed, and on-site notification made. No further actions are required.

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032170415 Determine appropriate emergency response actions per the ERPIP while maintaining an overview of plant conditions

COMMENTS:

The operator's performance was evaluated against the standards contained in this JPM and determined to be

SATISFACTORY UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ DATE: _____

CCNPP LICENSED OPERATOR

ADMINISTRATIVE TOPIC

JOB PERFORMANCE MEASURE

TASK: 032170415

DIRECTIONS TO TRAINEE:

1. To complete the task successfully, you must:

   - perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.

   - comply with industrial safety practices, radiation safety practices and use of event free tools. **NOTE: Violation of safety procedures will result in failure of the JPM.**

2. Initial Conditions:

   a. Unit-1 was at 100% power when the letdown line radiation monitor alarmed.

   b. RCS sample analysis indicated RCS activity of 650 μci/cc dose equivalent iodine.

   c. A plant shutdown, to comply with technical specification requirement, was begun.

   d. During the shutdown, an automatic reactor trip and safety injection occurred.

   e. EOP-6 was implemented upon completion of EOP-0, for a SGTR on #11 S/G.

   f. After failing to meet the Intermediate SFSC of EOP-6, EOP-8 was implemented 20 minutes ago (due to S/G Safety stuck open on #11 S/G).

   g. You are performing the duties of the Shift Manager.

3. Initiating Cue: You are called to the Control Room to implement the Emergency Response Plan as per step B of EOP-8. Are there any questions? You may begin.

ATTACHMENT 2
EMERGENCY CLASSIFICATION

A. CLASSIFY THE EMERGENCY

NOTE

The decision to classify an emergency may **NOT** be delegated.

1.0 **EVALUATE** conditions against ATTACHMENT 1, EMERGENCY ACTION LEVEL (EAL) CRITERIA.

B. IMPLEMENT EMERGENCY RESPONSE PLAN ACTIONS

1.0 **IF** an EAL is satisfied,

THEN OBTAIN an ATTACHMENT 3, INITIAL NOTIFICATION FORM (from this procedure).

GO TO the respective classification tab.

General Emergency Actions..	Attachment 4
Site Emergency Actions.....	Attachment 9
Alert Actions.....	Attachment 11
Unusual Event Actions	Attachment 13

1.1 **IF** an EAL is **NOT** satisfied,

THEN REPEAT step A.1.0 of this attachment until conditions no longer warrant evaluation.

EXIT this procedure.

ATTACHMENT 3
INITIAL NOTIFICATION FORM

Page 1 of 2

USE this form for initial notification and emergency class upgrading and downgrading only.

FORM instructions are on back.

1.	This is/is not an exercise. (circle one)	8.	Radioactivity: ☐ Has Not Been Released ☑ Is Being Released: ☐ From The Plant ☐ In The Plant ☐ Has Been Released: ☐ From The Plant ☐ In The Plant
2.	Name of Caller:		
3.	Title/Organization: BGE		
4.	Facility: CALVERT CLIFFS		
5.	Emergency Class: ☐ None ☐ Unusual Event ☐ Alert ☐ Site Emergency ☑ General Emergency	9.	Type of Release: ☐ None ☑ Airborne ☐ Waterborne ☐ Surface Spill
		10.	Population Affected: ☐ None ☑ Yes
6.	Time Declared: _____ Date: _____	11.	Protective Action Recommended (choose one only): ☐ None ☐ Shelter entire 10 mile EPZ ☐ Evacuate PAZ 1 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ ☑ Evacuate PAZ 1 & 3 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ ☐ Evacuate PAZ 1, 2, & 3 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ ☐ Evacuate PAZ 1 & 2 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ
7.	Nature of Incident: ☐ None Enter EAL Code (B G 1) Circle EAL Number N/A 1 2 3 4 5 6 Enter two digit event code: (5 9)	12.	This is/is not an exercise. (circle one)

Site Emergency Coordinator signature: _____

NOTE

Maryland State Police receives calls for Maryland Emergency Management Agency until their offices are manned. Maryland Department of the Environment Security receives calls for Maryland Department of the Environment until their offices are manned.

	LOCATION	TIME	RECEIVED BY	DEDICATED PHONE	RADIO	OUTSIDE LINE
1.	CALVERT					(410-535-3491)
2.	ST. MARY'S					(301-475-8016)
3.	DORCHESTER					(410-228-2222)
4.	MEMA (or MSP)					(410-517-3600)
5.	MDE					(410-631-3937)
** NOTIFY the NRC immediately after the above agencies have been notified.**						
6.	NRC					(301-816-5100)

RECORD time all calls to above agencies were completed: _____

Communicator signature: _____

ATTACHMENT 4
GENERAL EMERGENCY ACTIONS

Page 1 of 3

ACTIONS FOR SHIFT MANAGER

A. COMPLETE THE INITIAL NOTIFICATION FORM

1.0 **COMPLETE** ATTACHMENT 3, INITIAL NOTIFICATION FORM, as follows (items not mentioned are self-explanatory).

a. Item 6, Time Declared: complete this last.

b. Item 7, Nature of Incident:

- NOTE -

EAL code and number and event code are from ERPIP 3.0, ATTACHMENT 1, EALS, PAGE. 1.

Enter EAL code.
Circle EAL number.
Enter two-digit event code.

c. Item 8, Radioactivity: radioactivity is being/has been released if any of the following conditions are/have been met:

(1) The release flowpath monitor is/was in alarm.

(2) The release is/was greater than Technical Specification limits.

(3) The release is/was accidental.

d. Item 10, Population Affected: check "YES."

e. Item 11, Protective Actions Recommended: select a protective action from ATTACHMENT 5, GENERAL EMERGENCY PROTECTIVE ACTION RECOMMENDATIONS.

B. HAVE THE INITIAL NOTIFICATION TRANSMITTED

1.0 **DIRECT** the Control Room Communicator to transmit the Initial Notification information to the offsite agencies according to ERPIP 105, CONTROL ROOM COMMUNICATOR, OFFSITE AGENCY NOTIFICATIONS.

ATTACHMENT 4
GENERAL EMERGENCY ACTIONS

Page 3 of 3

ACTIONS FOR SHIFT MANAGER

G. RELEASE PERSONNEL

1.0	**IF** site personnel that do not have an emergency organization position have been released from the site, **THEN GO TO** step H. UPDATE STATE AND COUNTIES.	1.1	**IF** site personnel that do not have an emergency organization position have not been released from the site, **THEN DIRECT** that they be released from site. **COORDINATE** release through the Security Supervisor.

H. UPDATE STATE AND COUNTIES

1.0	**UPDATE** State and Counties when either of the following conditions occur as follows: • Within 1 hour of significant plant condition changes (e.g., start of significant offsite release; significant release change). • When three hours has elapsed since the last update. a. **Obtain** an ATTACHMENT 6, FOLLOW-UP COMMUNICATION FORM. **RETURN** to this part. b. **COMPLETE** the Follow-up Communication form. c. **INSTRUCT** the Communicator to transmit the form information to State and County agencies ACCORDING TO ERPIP 105, CONTROL ROOM COMMUNICATOR, OFFSITE AGENCY NOTIFICATIONS.	1.1	**IF** State or County agencies need more detailed information, **THEN** consider ATTACHMENT 7, DETAILED FOLLOW-UP COMMUNICATION FORM. a. **OBTAIN** ATTACHMENT 7, DETAILED FOLLOW-UP COMMUNICATION. **RETURN** to this part. b. **ASSIGN** someone to complete the form and return it for your review and signature. c. **INSTRUCT** the Communicator to transmit the form information to State and County agencies according to ERPIP 105, CONTROL ROOM COMMUNICATOR, OFFSITE AGENCY NOTIFICATIONS.
2.0	**REPEAT** step H. **UPDATE STATE AND COUNTIES** of this attachment until relieved of Interim-SEC responsibilities. **DO NOT** downgrade from General Emergency. **DO NOT** change the General Emergency Protective Action Recommendation.		

ATTACHMENT 5
GENERAL EMERGENCY PROTECTIVE ACTION RECOMMENDATIONS

A. SELECT A PROTECTIVE ACTION RECOMMENDATION

- NOTE -

A protective action recommendation must be made for General Emergency.

1.0 **IF** a controlled release of radioactive material from containment is to be commenced in less than 2 hours AND there is assurance that the release will be a short term puff release lasting no more than 2 hours:

THEN make the following Protective Action Recommendation:

"Shelter entire 10 mile EPZ."

- NOTE -

Page 2 of this attachment may be used to determine which protective action zones (PAZs) are affected.

1.1 **IF** the criteria of A.1.0 are not satisfied, **THEN** make the following Protective Action Recommendation:

Evacuate [select one] (PAZ 1) (PAZ 1 & 3) (PAZ 1, 2, & 3) (PAZ 1 & 2) unless conditions make evacuation dangerous, and shelter remainder of 10 mile EPZ."

ATTACHMENT 5
GENERAL EMERGENCY PROTECTIVE ACTION RECOMMENDATIONS

Page 2 of 2

Use DIR 10 or DIR 60 from meteorological data screen (DRDT) for direction wind is from. Given direction wind is from, determine the down wind sector and appropriate PAZs:

- If the down wind sector is one of the following: A, B, C, D, E, F, then evacuate PAZ 1
- If the down wind sector is one of the following: G, H, J, K, then evacuate PAZ 1 and 3
- If the down wind sector is L, then evacuate PAZ 1, 2, and 3
- If the down wind sector is one of the following: M, N, P, Q, R, then evacuate PAZ 1 and 2