

DRAFT SECTION "A" OPERATING
RO

Facility: **CCNPP** Date of Examination: **03/01/2004**
 Examination Level (circle one): **RO** / SRO Operating Test Number:

Administrative Topic (see Note)	Describe activity to be performed
A.1.a Conduct of Operations	2.1.19 3.0 Ability to use plant computer to obtain and evaluate parametric information on plant system or component status Enter feed flow correction factors into the plant computer per OI-50A, verifying NI calibration. <i>OI-50A(2004)</i>
A.1.b Conduct of Operations	2.1.25 2.8 Ability to obtain and interpret station reference materials such as graphs, monographs, and tables which contain performance data <i>NEOP-301-3</i> Verify shutdown margin in mode 3 with one stuck CEA
A.2 Equipment Control	2.2.13 3.6 Knowledge of tagging and clearance procedures Verify tagout boundaries per NO-1-112 <i>NO-112 (2004)</i>
A.3 Radiation Control	
A.4 Emergency Plan	2.4.43 2.8 Knowledge of emergency communications and techniques <u>Recall Emergency Response Organization per ERPIP-105</u> <i>ERPIP-105 (2004) changed from Original</i>

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

Original new 11

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE OI-50A (2004)

SYSTEM: Feedwater

TASK: 078.001 Perform a Hand Calorimetric Calculation of Reactor Power

PURPOSE: Evaluates an Operators ability to enter feedwater flow correction factors in the plant computer

JOB PERFORMANCE MEASURE

CALVERT CLIFFS NUCLEAR POWER PLANT

LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE OI-50A (2004)

ELEMENT

STANDARD

(* = CRITICAL STEP)

PERFORMER'S NAME: _____

APPLICABILITY:

RO and SRO

PREREQUISITES:

Completion of the knowledge requirement of the Initial License class training program for the Chemical & Volume Control System.

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:

None

REFERENCE PROCEDURE(S):

OI-50A

TASK STANDARDS:

This JPM is complete when 11 charging pump is running and Technical Specification action is addressed.

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE OI-50A (2004)

ELEMENT

STANDARD

(* = CRITICAL STEP)

SIMULATOR SETUP

- a. IC-13, Unit 1, 100%
- b. Verify feed flow correction factors, PTF1100 and PTF 1200 are set at 0.

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE OI-50A (2004)

ELEMENT (* = CRITICAL STEP)	STANDARD
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TIME START _____

CUE: Provide the candidate with a copy of the SHIFT TURNOVER INFORMATION SHEET.

_____ Identify & locate OI-50A, section 6.20 Same as element.

A. INITIAL CONDITIONS

<p>* _____ 3. The new Calorimetric Power (New PA 912) that will result from the new Feedwater Flow Correction Factors, has been calculated, understood and determined to be acceptable.</p>	<p>Calculates a new PA 912 of 2684 to 2700 and determines it is acceptable.</p>
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$$\text{New PA 912} = \text{Current PA 912} \times \frac{\text{New CF}_{1100} + \text{New CF}_{1200}}{\text{Current CF}_{11} + \text{New CF}_{12}}$$

$$\text{Current CF}_{11} + \text{New CF}_{12}$$

B. PERFORMANCE

_____ 1. SELECT SYSTEM DIAGRAMS from the MAIN MENU.	Same as element.
_____ 2. SELECT AMAG FLOW MULTIPLIER from the SYSTEM DIAGRAMS MENU.	Same as element
_____ 3. ENTER the Date and Time: (MM/DD/YY HH:MM)	Enters date and time correctly
_____ 4. DEPRESS <XMIT>	Same as element.
* _____ 5. ENTER the desired PTF 1100, 11/21 FW Flow Correction Factor	Enters 1.0017 for PTF 1100
* _____ 6. DEPRESS <XMIT>	Same as element.
* _____ 7. ENTER the desired PTF 1200, 12/22 FW Flow Correction Factor	Enters 0.9903 for PTF 1200
* _____ 8. DEPRESS <XMIT>	Same as element.
9. INDEPENDENTLY VERIFY that the correct values have been properly	Asks for verification

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE OI-50A (2004)

ELEMENT

STANDARD

(* = CRITICAL STEP)

entered into the Plant Computer

NOTE

The Shift Turnover Sheet should always reflect the Feedwater Flow Correction Factors from the most recently conducted ETP.

___ 10.

IF this section is being performed to modify the Feedwater Flow Correction Factors with new values just obtained from performing an ETP, **THEN UPDATE** the Feedwater Flow Correction Factors on the Shift Turnover Sheet

Determines this step is **NOT** applicable.

* ___ 11.

IF, following a corresponding factor change, the difference between calculated thermal power and RPS NI power exceeds the allowable limits of OI-30, **THEN PERFORM** an NI Calibration PER OI-30
NUCLEAR INSTRUMENTATION

Determines need for NI calibration **IF** the difference between calculated power and power indications is greater than ½%.

TIME STOP ___

TERMINATING CUE:

This JPM is complete when the candidate has entered the values in the plant computer and power indications have stabilized. No further actions are required.

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE OI-50A (2004)

TASK: 078.001 Perform a Hand Calorimetric Calculation of Reactor Power

Document below any instances of failure to 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.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

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: 078.001

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 has returned to 100% power operation after reducing power to 70% repair a SGFP.
 - b. You are performing the duties of the Unit 1 CRO.
3. Initiating Cue: The Control Room Supervisor has directed you to restore the feedwater flow correction factors from the Shift Turnover Information Sheet, per OI-50A. Initial Conditions 1. and 2. are satisfied. Begin with Initial Condition 3. Are there any questions? You may begin.

6.20 MODIFYING FEEDWATER FLOW CORRECTION FACTORS [REFERRAL USE]

A. Initial Conditions

- 1. Rx Power (Thermal Power) is between 95% (2565 MWth) and 100% (2700 MWth). | 04/01
- 2. At least one of the following conditions exist: | 04/01
 - An ETP has been conducted and a new value of the Feedwater Flow Correction Factor has been determined.

OR

- The Principal Engineer of the Secondary Systems Engineering Unit has conducted an evaluation of the current plant status **AND** has determined the appropriate values for the Feedwater Flow Correction Factors for operational use (for examples; the previously determined Feedwater Flow Correction Factor values found on the Shift Turnover Sheet **OR** a value of 1.0.). | 04/01

OR

- The Feedwater Flow Correction Factors have been directed to be set to a value of 1.0 by another procedure. | 04/02
- 3. The new Calorimetric Power (New PA912) that will result from the new Feedwater Flow Correction Factors (New CF) has been calculated, understood and determined to be acceptable. **[B0880]** | 04/01

$$\text{New PA912} = \text{Current PA912} \times \frac{\text{New CF}_{11(21)\text{Hdr}} + \text{New CF}_{12(22)\text{Hdr}}}{\text{Current CF}_{11(21)\text{Hdr}} + \text{Current CF}_{12(22)\text{Hdr}}}$$

CAUTION

The Feedwater Flow Correction Factors are automatically restored to a value of 1.0 when PA911 indicates less than 95%(2565 MWth). | 04/01

IF PA911 becomes Unreliable (U),
THEN the Feedwater Flow Correction Factors may have to be changed to a value of 1.0 manually should power be lowered to less than 95%.

NOTE

WHEN the Feedwater Flow correction Factors are changed,
THEN PA911 (and other computed points using feedwater flow) will change to an Entered (E) status (or another status change) for a short time while the entered value moves through the calculation. These computed points will return to normal. | 04/01

B. Performance

- 1. **SELECT SYSTEM DIAGRAMS** from the MAIN MENU. | 04/01

6.20.B Performance (Continued)

- | | | |
|----|---|-------|
| 2. | SELECT AMAG FLOW MULTIPLIER UPDATE from the SYSTEM DIAGRAMS MENU. | 04/01 |
| 3. | ENTER the Date and Time: (MM/DD/YY HH:MM) | 04/01 |
| 4. | DEPRESS <XMIT>. | 04/01 |
| 5. | ENTER the desired PTF1100, 11/21 FW Flow Correction Factor. | 04/01 |
| 6. | DEPRESS <XMIT>. | 04/01 |
| 7. | ENTER the desired PTF1200, 12/22 FW Flow Correction Factor. | 04/01 |
| 8. | DEPRESS <XMIT>. | 04/01 |
| 9. | INDEPENDENTLY VERIFY that the correct values have been properly entered into the Plant Computer. | 04/01 |

NOTE

The Shift Turnover Sheet should always reflect the Feedwater Flow Correction Factors from the most recently conducted ETP.

04/01

- | | | |
|-----|---|-------|
| 10. | IF this section is being performed to modify the Feedwater Flow Correction Factors with new values just obtained from performing an ETP, THEN UPDATE the Feedwater Flow Correction Factors on the Shift Turnover Sheet. | 04/01 |
| 11. | IF , following a correction factor change, the difference between calculated thermal power and RPS NI power exceeds the allowable limits of OI-30, NUCLEAR INSTRUMENTATION, THEN PERFORM an NI Calibration PER OI-30, NUCLEAR INSTRUMENTATION. | 04/01 |

SHIFT TURNOVER INFORMATION SHEET

DATE: *March 1, 2004*

ON-COMING SHIFT: DAY

UNIT STATUS

PARAMETER	UNIT 1	UNIT 2
MODE:	1	1
% POWER:	100	100
RCS TEMPERATURE:	547.5	547.6
RCS PRESSURE:	2250	2250
RCS BORON	390	1202
MWe NET:	869	882
GROSS RCS LEAKAGE:	0.06	0.09
BULK POWER NOTIFICATION	Normal	

NON-ROUTINE SURVEILLANCE REQUIREMENTS [B0125]

List non-routine, conditional, & mode dependent surveillances (e.g. chemistry samples, operability verifications, ETP's, <7 day STP's)

1-RIC-5421A (11 N-16)	OOS for STP-M-565-1	
TRM 15.3.1.B 1-RIC-5421 OOS	Initiate pre-planned alternate method of monitoring effluents	10/10/03 1950
2-RE-5320B (Main Vent)	OOS, Tripped off due to low tritium flow	

EVOLUTIONS IN PROGRESS

0	Bypassing the MWIX PREFILTER to transfer the MWRT to an RCWMT or RCWRT	OI-17D, Sect. 6.23.C.3.c
0	Bypassing MWIX due to High DP	OI-17D, Sect. 6.20.C.2
1	Portable purifier on 12 SGFP LO	OI-9A, Sect. 6.25.B.10.g
1	PSW aligned to CWP Seals	OI-14A, Sect. 6.8.B.8
1	11 RCWMT in recirc for processing to 12 RCWMT via NUKEM skid	OI-17C, Sect. 6.19.B.12
2	Temporary Air Compressor Aligned	OI-18A, Sect. 6.20.B.2

SURVEILLANCE TESTS

Unit 1		Unit 2	
DATE	STP	DATE	STP
	F-693 (DDD 2/19/04)		
12/13	7B, 62, 64	12/13	99
12/14	71, 90	12/14	8B (M), 71, 90
12/15	73B, F-290	12/15	65
12/16	55, 73C	12/16	65I

Shift Manager

SHIFT TURNOVER INFORMATION SHEET

EQUIPMENT AVAILABILITY								
OUTSIDE	UNIT 1		UNIT 2					
Salt Water Pumps [B0622]	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input type="checkbox"/> 13	14 Bus	<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input type="checkbox"/> 23	24 Bus
Circulating Water Pumps	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 13		<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input checked="" type="checkbox"/> 23	
	<input checked="" type="checkbox"/> 14	<input checked="" type="checkbox"/> 15	<input checked="" type="checkbox"/> 16		<input checked="" type="checkbox"/> 24	<input checked="" type="checkbox"/> 25	<input checked="" type="checkbox"/> 26	
Screen Wash Pumps	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 13	<input type="checkbox"/> 14	<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input checked="" type="checkbox"/> 23	<input type="checkbox"/> 24
Condensate Precoat Filters	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 13		<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input checked="" type="checkbox"/> 23	
		<input checked="" type="checkbox"/> 14	<input checked="" type="checkbox"/> 15			<input checked="" type="checkbox"/> 24	<input checked="" type="checkbox"/> 25	
Condensate Demineralizers	<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13		<input type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23	
		<input type="checkbox"/> 14	<input type="checkbox"/> 15			<input type="checkbox"/> 24	<input type="checkbox"/> 25	
TURBINE BUILDING	UNIT 1		UNIT 2					
Condensate Pumps	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 13		<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input type="checkbox"/> 23	
Condensate Booster Pumps	<input checked="" type="checkbox"/> 11	<input type="checkbox"/> 12	<input checked="" type="checkbox"/> 13		<input checked="" type="checkbox"/> 21	<input type="checkbox"/> 22	<input checked="" type="checkbox"/> 23	
Heater Drain Pumps		<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12			<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	
Stm Generator Feed Pumps	11 IN SERV MS		12 IN SERV MS		21 IN SERV MS		22 IN SERV MS	
Aux Feedwater Pumps	AUTO-11		STBY-12	<input type="checkbox"/> 13	<input type="checkbox"/> 23	AUTO-21		STBY-22
			<input type="checkbox"/> 23		<input type="checkbox"/> 13			
Aux Feedwater X-Conn [B0620]	<input type="checkbox"/> 2-AFW 4550				<input type="checkbox"/> 1-AFW-4550			
Inst Air Compressors	11-AUTO		12-SPEED		21-SPEED		22-AUTO	
Air Dryers		<input type="checkbox"/> 11	<input checked="" type="checkbox"/> 12			<input checked="" type="checkbox"/> 21	<input type="checkbox"/> 22	
Plant Air Compressors	11-STANDBY				21-RUN			
Service Water Pumps [B0622]	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input type="checkbox"/> 13	14 Bus	<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input type="checkbox"/> 23	24 Bus
Amertaps	<input type="checkbox"/> 11A	<input type="checkbox"/> 12A	<input type="checkbox"/> 13A		<input type="checkbox"/> 21A	<input type="checkbox"/> 22A	<input type="checkbox"/> 23A	
	<input type="checkbox"/> 11B	<input type="checkbox"/> 12B	<input type="checkbox"/> 13B		<input type="checkbox"/> 21B	<input type="checkbox"/> 22B	<input type="checkbox"/> 23B	
Cond Air Removal Pumps	<input type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 13	<input type="checkbox"/> 14	<input type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input checked="" type="checkbox"/> 23	<input type="checkbox"/> 24
Misc. Drain Tank	11-Warming				21-Not Warming			
Aux Boiler Status	11-Hot Standby				12-Hot Standby			

SHIFT TURNOVER INFORMATION SHEET

EQUIPMENT AVAILABILITY (continued)							
AUXILIARY BUILDING	UNIT 1				UNIT 2		
Reactor Coolant Pumps	<input checked="" type="checkbox"/> 11A	<input checked="" type="checkbox"/> 11B	<input checked="" type="checkbox"/> 12A	<input checked="" type="checkbox"/> 12B	<input checked="" type="checkbox"/> 21A	<input checked="" type="checkbox"/> 21B	<input checked="" type="checkbox"/> 22A <input checked="" type="checkbox"/> 22B
Charging Pumps [B0622]	<input type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input type="checkbox"/> 13	11 Bus	<input checked="" type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23 21 Bus
Boric Acid Pumps	<input type="checkbox"/> 11	<input type="checkbox"/> 12			<input type="checkbox"/> 21	<input type="checkbox"/> 22	
Boric Acid Storage Tanks	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12			<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	
HPSI Pumps [B0622]	<input type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	14 Bus	<input type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23 24 Bus
LPSI Pumps	<input type="checkbox"/> 11	<input type="checkbox"/> 12			<input type="checkbox"/> 21	<input type="checkbox"/> 22	
Containment Spray Pumps	<input type="checkbox"/> 11	<input type="checkbox"/> 12			<input type="checkbox"/> 21	<input type="checkbox"/> 22	
Containment Air Coolers	<input type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 13	<input checked="" type="checkbox"/> 14	<input checked="" type="checkbox"/> 21	<input checked="" type="checkbox"/> 22	<input checked="" type="checkbox"/> 23 <input type="checkbox"/> 24
Component Cooling Pumps [B0622]	<input checked="" type="checkbox"/> 11	<input type="checkbox"/> 12	<input type="checkbox"/> 13	14 Bus	<input checked="" type="checkbox"/> 21	<input type="checkbox"/> 22	<input type="checkbox"/> 23 24 Bus
Switchgear HVAC [B0621]	<input type="checkbox"/> 11 RECIRC	<input checked="" type="checkbox"/> 12 RECIRC			<input type="checkbox"/> 21 RECIRC	<input checked="" type="checkbox"/> 22 RECIRC	
Control Room HVAC [B0619]		<input type="checkbox"/> 11				<input checked="" type="checkbox"/> 12	

WASTE SYSTEMS		
RCW Receiver Tanks	11-OFF SERVICE	12-IN SERVICE
RCW Monitor Tanks	11-RECIRC W/O IX'S	12-IN SERVICE
RCW Evaporators	No RCWE is operating.	
WGDT In Service	11 WGDT	

SPENT FUEL POOL COOLING SYSTEM						
PUMP	COOLER	SUCTION	DISCHG	PROCEDURE	PURIF	SKIM
11	11	11 RWT	11 RWT	OI-24E, Sect. 6.1	NO	NO
12	12	11 SFP	21 SFP	OI-24A, Sect. 6.8	NO	NO

MISCELLANEOUS	UNIT 1	UNIT 2
S/G Blowdown Status	150 gpm to CW No IX On per OI-8A Sect. 6.2	60 gpm to CW No IX On per OI-8A Sect. 6.2
VCT Pressure Band	25-29 psig H2	25-29 psig H2

SHIFT TURNOVER INFORMATION SHEET

EQUIPMENT AVAILABILITY (continued)				
ELECTRICAL SYSTEM	UNIT 1			UNIT 2
500KV High Lines	<input checked="" type="checkbox"/> 5051		<input checked="" type="checkbox"/> 5072	<input checked="" type="checkbox"/> 5052
500KV Buses	<input checked="" type="checkbox"/> BLACK		<input checked="" type="checkbox"/> RED	
13KV Supplies	<input checked="" type="checkbox"/> P-13000-1		<input checked="" type="checkbox"/> P-13000-2	
SMECO Bkr Status	<input checked="" type="checkbox"/> 252-2301	<input type="checkbox"/> 0SH301	<input checked="" type="checkbox"/> 0SH302	
Site Self Power Feeders	<input checked="" type="checkbox"/> 252-1106		<input checked="" type="checkbox"/> 252-2106	
13KV Buses	<input checked="" type="checkbox"/> 11	<input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 23	<input checked="" type="checkbox"/> 21 <input checked="" type="checkbox"/> 22
Voltage Regulators	Auto 1102 Auto 2102 Auto 1101	Auto 1103 Auto 2103 Auto 2101		
4KV Transformers	<input checked="" type="checkbox"/> U-4000-11 <input checked="" type="checkbox"/> U-4000-21 <input checked="" type="checkbox"/> U-4000-13	<input checked="" type="checkbox"/> U-4000-12 <input checked="" type="checkbox"/> U-4000-22 <input checked="" type="checkbox"/> U-4000-23		
4KV Buses	<input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12 <input checked="" type="checkbox"/> 13 <input checked="" type="checkbox"/> 14	<input checked="" type="checkbox"/> 21 <input checked="" type="checkbox"/> 22 <input checked="" type="checkbox"/> 23 <input checked="" type="checkbox"/> 24		
Diesel Generators	<input type="checkbox"/> 1A <input type="checkbox"/> 1B <input type="checkbox"/> 0C	<input type="checkbox"/> 2A <input type="checkbox"/> 2B <input type="checkbox"/> 0C		
480V Buses	<input checked="" type="checkbox"/> 11A <input checked="" type="checkbox"/> 11B <input checked="" type="checkbox"/> 14A <input checked="" type="checkbox"/> 14B	<input checked="" type="checkbox"/> 21A <input checked="" type="checkbox"/> 21B <input checked="" type="checkbox"/> 24A <input checked="" type="checkbox"/> 24B		
125VDC Battery Chargers	<input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 23 <input checked="" type="checkbox"/> 12 <input checked="" type="checkbox"/> 24	<input checked="" type="checkbox"/> 14 <input checked="" type="checkbox"/> 22 <input checked="" type="checkbox"/> 13 <input checked="" type="checkbox"/> 21		
125VDC Buses	<input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 12	<input checked="" type="checkbox"/> 22 <input checked="" type="checkbox"/> 21		
120VAC Vital Buses	<input checked="" type="checkbox"/> 11 <input checked="" type="checkbox"/> 21 <input checked="" type="checkbox"/> 13 <input checked="" type="checkbox"/> 23	<input checked="" type="checkbox"/> 14 <input checked="" type="checkbox"/> 24 <input checked="" type="checkbox"/> 12 <input checked="" type="checkbox"/> 22		

SPENT FUEL EQUIPMENT CHECKOUTS:

SFHM PL O-81-1-1-Q	New Insp Elevator OI-25B App A	SF Insp Elev OI-25B App B
12/9/03	01/30/03	7/2/02

OOS SR EQUIPMENT

OOS NSR EQUIPMENT

UNIT 1 & COMMON	UNIT 2	UNIT 1 & COMMON	UNIT 2
RVLMS A	2-RE-5320B	11A, 12B, 13B Amertaps	21 CAR
11 MSL RMS (1-RIC-5421)	2-LI-110Y @ 2C43	11 HDPp LO Clr Fan	21 PAC
11 N-16 RMS (1-RIC-5421A)		14A Travel Screen	

SHIFT TURNOVER INFORMATION SHEET

GENERAL INFORMATION

UNIT 1 AND COMMON

SW PARAMETERS:

Latest STP 0-73A: 11 Pp-9/03/03, 12 Pp-9/4/03, 13 Pp-9/4/03 (Required for dewatering operations in OI-29)	11 Header	11 PP	13 PP	12 Header	12 PP	13 PP
	11 ECCS Clr	797		12 ECCS	890	749
	11 CCW HX	6522		12 CCW HX	6725	6745

Max Header Pressure PE 1-12-21-O-W	12/06/03	11 Hdr / 11 PP	32 psig			
	12/06/03	12 Hdr / 12 PP	34 psig			
	10/27/03	11 Hdr / 13 PP	33 psig			
	11/14/03	12 Hdr / 13 PP	33 psig			
Feedwater Flow Correction Factors from ETP 03-001R						
02/16/04	11 FW Hdr	PTF1100	1.0017	12 FW Hdr	PTF1200	0.9903

LONG TERM NOTES:

1. Temp Alt 1-02-0065 removed Aux alarm X28 (12B CBO Temp Hi), failed RTD. Computer point T184 is accurate for monitoring 12B CBO temperature. Do not remove T184 from the Selected Computer point group until T/A 1-02-065 is removed.
2. The following ABB breakers may not operate after being closed. Ensure an Operator is stationed locally to open the breaker if it shuts, but does not indicate fully closed (breaker may not trip remotely or automatically, and the associated DG may be OOS). Hi side fdrs U-440-11A (1114), 11B (1102), 14A (1402), 14B (1413). Pink Tags on the brkr handswitches.
3. RECO accepted by Ops for Charging Pumps stating Suction Stabilizers do not impact operability. Discharge Desurgers may impact operability if desurger pressure is below 500 psig. RECO at CRS desk, RPA submitted for Pes 1/2-041-04-O-M.
4. When stroking 1-SW-5153-CV, have Mechanical Maintenance and Engineering present to locally monitor the valve for sticking, binding or sluggish performance. Report the results to the System Manager.
5. Do not perform any evolution that would cause the migration of Silica from the SFP to SDC, SITs, or RWTs.
6. Place 14 B/U Heater bank in Off prior to performing the plant calorimetric. Non-conservative for calc if you use 300 KW.
7. Log completion of Quarterly PEs and above (e.g., Semi-annual, Annual, etc.) in the CRO Narrative Log to assist tracking.

SHORT TERM NOTES:

1. When it is necessary to divert 2 times in a 24-hour period, the CMF for 1-CVC-325 should be re-evaluated due to ALARA concerns.
2. Fill the SFP from the Unit 1 RWT when required.
3. Nameplate information on the new motor for 13 CWP has different starting duties than OI-14. You are allowed 2 ambient, and 1 operating temperature start within 30 minutes (OI-14 allows 3 and 2 within one hour). Paul Gray SSEU will resolve with the vendor and let PDU know resolution. New rotor field specs are 6.3-6.7 amps; local label has been changed.
4. STP-F-693-0 on hold pending procedure/TRM change. Estimated completion date of mid December.
5. Perform supplemental leakrate weekly when CVC-325 is open to verify leakage by CVC-500.
6. Per Chemistry request maintain U-1 VCT pressure < 29# when makeup to VCT.
7. Next time we discharge the MWMT Sal Raspa needs to be contacted to perform PMT for MO#0200301363.
8. When updating Webster, you need to update MOPU if the activity has a MO and Ops are the lead RMG. Leave a VM with MOPU x7500 to take the MO to 'W9' Status. Ops STPs are being assigned MOs to allow Ops resource loading.

OPERATOR WORKAROUNDS / COMP ACTIONS

EQUIPMENT	COMP ACTION / DEFICIENCY	FREQ	WATCH	DATE	IR/MO#	PRI
OC DG Fire Trouble	Monitor Fire Panel	Hourly	CRO	12/9/03	IR4-025-391	2
Steam Seals	Adjust bypass MOV, 1-MOV-4656 (CM 03-193)	As req'd	CRO	11/12/02	1200202451	4
SFP Level	Check SFP level due to alarm card pulled	1x/shift	CRO	1/29/03	0200300311	3
1-CVC-325	Open for diversion to WPS (CM 03-186)	As Req'd	ABO	6/07/03	1200303133	2
MSIVs	Replace Shuttle valves prior to partial stroke	As Req'd	FINM			
Ecolochem Truck	Monitor mixed bed silica	1x/6 hrs	Chen	12/12/03		
1C57	Monitor Condensate Oxygen	1x/6 hrs	Chem	11/26/03		
1-RE-5320-A&B	Mn Vent Skid alarm function is not working properly	1x/6 hrs	Chem	10/08/03	1200302682	4
SFP vent EXH filter	Monitor filter D/P < 5" on 0-PDIS-5418	1x/6 hrs	ABO	11/22/03	1200303873	3

SHIFT TURNOVER INFORMATION SHEET

GENERAL INFORMATION

UNIT 2

SW PARAMETERS:

Latest STP 0-73A: 21 Hdr-12/10/03, 22 Hdr-12/11/03 (Required for dewatering operations in OI-29)

21 Header	21 PP	23 PP
21 ECCS Clr	830	830
21 CCW HX	7253	7103

22 Header	22 PP	23 PP
22 ECCS	817	0
22 CCW HX	7163	0

Max Header Pressure PE 2-12-21-O-W	12/06/03	21 Hdr / 21 PP	35.5 psig
	12/06/03	22 Hdr / 22 PP	35.5 psig
	12/01/03	21 Hdr / 23 PP	35.0 psig
	9/09/03	22 Hdr / 23 PP	34.0 psig

Feedwater Flow Correction Factors from ETP 03-001R								
02/16/04		21 FW Hdr	PTF1100	.9903		22 FW Hdr	PTF1200	.9940

LONG TERM NOTES:

1. Do NOT unisolate 2-PDT-123A prior to fixing weld leak (satisfies requirements of TRM 15.4.3.A).
2. CSAS BL annunciation was disabled and will not alarm at 2C08 (TA 2-03-0025). CSAS AL annunciation is still functional.
3. The 23 Condensate Pp oil pump has higher than target vibrations. Standby operation of 23 Cond Pp is suggested (IR4-001-613).
4. When stroking 2-SW-5163-CV, locally monitor the valve for sticking, binding or sluggish performance and record the results in the comments section of the STP coversheet.

SHORT TERM NOTES:

1. Our new State Discharge permit allows the Plant Computer to be used for monitoring. No need to have TR-17 recorders on unless we lose the plant computer.
2. 21 & 22 125 VDC batteries on equalizing charge.
3. Outage Air Compressors staged too close to the turbine building. Atlantic (Buell) to move them back the required 30 ft from the building. If the compressor is run a Fire Watch will need to be stationed (Atlantic to supply).

OPERATOR WORKAROUNDS / COMP ACTIONS

EQUIPMENT	COMP ACTION / DEFICIENCY	FREQ	WATCH	DATE	IR/MO#	PRI
Plant Heating	Monitor Compression Tank level and fill as needed	As Req'd	TBO	11/27/03	IR4-026-167	
LP Turbine Steam Seal Regulators	Manually adjust seal pressure	As Req'd	TBO	4/25/03	2200302240	3
2-CVC-325	Open for diversion to WPS (CM 03-153)	As Req'd	ABO	6/7/03	2200302213	2
MSIVs	Replace Shuttle valve prior to partial stroke	As Req'd	FINM			
22 MSIV	Verify normal hydraulic fluid level (T/A 2-03-0015)	2x/shift	ABO	4/20/03	2200302033	3
Domestic water Chlorine Addition pump	Check proper operation	1x/6 hrs	Chem	11/18/03	0200302247	3
2-RE-5320A/B	Verify sampling in progress	1x/6 hrs	Chem	6/21/03	2200302932	4
2-MOV-6609	Manually cycle MOV due to ground on LS	1x/shift if <30%	TBO	11/30/03	IR4-026-300	3
2T21	Monitor Hotwell sample pump pressure	2x/shift	Chem	12/5/03	IR4-025-883	3
22A trav. Screen	Rotate (flow switch sticks)	2x/shift	OSO	12/6/03	IR4-024-898	3

SHIFT TURNOVER INFORMATION SHEET

U-1 EQUIPMENT DEFICIENCIES of INTEREST to OPS

(Include items which may result in an LCO or Equipment needed for reliable operation of the Unit)

EQUIPMENT	STATUS	DEFICIENCY	DATE	IR/MO#
1-LT-186	D	12B RCP upper oil reservoir low level alarm causing spurious alarms. T/A installed. To be worked RFO 2004.	2/2/03	1200300466 (S3)
Degasifier Accumulators/ 2LIC4264	D	Throttling 0-RCW-350 leads to liq waste generation (RPA submitted to OI-17C-1). Lvl cntrl sys needs adj	3/6/03	0200300531 (P3)
52-1704 (1A/0C 480V Bus Tie)	O	Seismic Restraint device questionable – leave cubicle empty (CM 03-069)	3/6/03	0200201073 (P5)
12 Cond Pump Vent to the Cond.	D	Pin hole leak will cause O ₂ problems if pump is secured. New vent line being fabricated.	5/3/03	1200302183 (S4)
1-FIC-5209	D	Controls at 3800 to 4200 gpm in lieu of design setpoint of 4550 gpm. Will be worked FINI rover.	5/6/03	1200302302 (P3)
1LG1424 (14B FW Htr Lvl Gage)	OOS	Steam leak. 1-ES-613 & 614 to be overhauled. (CM 03-150)	6/5/03	1200200050 (P9)
Rex the Trash Rake	D	The finger operating cable is frayed needs to be replaced.	7/2/03	0200301433 (P5)
12A RCP Lower Guide Brg T177	OOS	Abnormal rising trend – failed. Forced outage work list.	7/7/03	1200302849 (S3)
1B DG Air Compressor Bkr 52-1BG03	D	Door interlock will not allow breaker to close	7/15/03	1200302979 (P1)
1-CVC-500-CV	D	Leaks by approx 0.15 gpm. To be overhauled.	7/28/03	1200303133 (S3)
12A RCP Lower Thrust Brg TE	D	Unreliable. Troubleshooting for cause to be performed.	7/30/03	1200303159 (S3)
11 MSR Drain Tank NLCV	D	HLD opens periodically. NLCV actuator to be overhauled.	8/4/03	1200303201 (P9)
11 WBP Pump	OOS	Runs continuously with vacuum tank @ 19"	8/5/03	1200303244 (P2)
1-HS-1592 14 CAC Inlet	O	HS knob is cracked and will not operate. FINE rover.	8/30/03	1200303532 (P3)
1-SI-4151	O	Does not indicate full shut	8/30/03	1200303554 (P5)
13 Intake Sump 21 Pump	OOS	Hole in discharge pipe (CM-03-218)	9/18/03	2200303660 (P9)
11 Intake Sump # 11 Pump	OOS	Bkr 52-10732 Tripped Ground Shield (CM-03-222)	9/24/03	1200303716 (P1)
0-H2-1002 (Reserve Bank Pressure Gage PI-7558 Isolation) is cracked	D	Valve body is cracked on the downstream side of valve. Tagout 1200300709 hung for equipment safety.	10/1/03	0200301889 (P3)
12 Intake Sump 22 Pump	OOS	Won't Pump (CM-03-236)	10/20/03	2200303904 (P1)
Spent Fuel Pool Exh Ventilation	OOS	HEPA D/P too high causes low Charcoal D/P on checklist	10/20/03	1200303873 (P8)
1-RDV-160, 11 MSR 1 st Stg Maint Dm Condenser Isol	D	Radiography determined valve plug disconnected from stem.	10/24/03	1200303975 (P1)
AFW Air Amplifier	D	Accumulator pressures ~193#; amplifier pumps 1x/20 seconds without raising pressure. Minimum pressure limit = 190#	11/03/03	1200304018 (P3)
13 Cond Pp oil flex hose	D	Leaks oil 22 drops per minutes	11/6/03	1200304052 (P1)
12 Cond Bstr Pump	D	Shaft driven oil pump making "clicking" noise. Vib data indicates degradation. Oil pressure normal.	11/13/03	1200304148 (P1)
11 IS Fan	D	In slow due to cycling between fast & slow when in Auto	11/17/03	IR4-019-216
0-N2-6343-PCV	OOS	Isolated due to leak (CM-03-254)	11/26/03	0200302264 (P3)
Alarm F48 11 Charging Pp	D	Alarms with good seal tank level	11/26/03	1200304401
52-10678, 11 HD Pp LO Clr Fan	OOS	Breaker found tripped	12/5/03	IR4-024-892
OC DG Fire Trouble Alarm	OOS	Battery OOS – fire detection is still operable	12/9/03	IR4-025-391

TECH SPEC EQUIPMENT		NON-TECH SPEC EQUIPMENT	
[O]	OPERABLE	[OOS]	OUT OF SERVICE
[I]	INOPERABLE	[D]	DEGRADED
[I/F]	INOPERABLE, BUT FUNCTIONAL		

SHIFT TURNOVER INFORMATION SHEET

U-2 EQUIPMENT DEFICIENCIES of INTEREST to OPS

(Include items which may result in an LCO or Equipment needed for reliable operation of the Unit)

EQUIPMENT	STATUS	DEFICIENCY	DATE	IRMO
2FI6301	D	Air leak (CM 01-018)	1/22/01	2200003150 (S3)
23 Charging Pump	O	60 dpm – discharge desurger	8/9/02	2200203121(S3)
PDT-123A (21A RCP PDT)	D	RCS Leak at transmitter (CM 03-109)	4/20/03	2200302013 (S3)
2-LI-110Y-1 & 2-LIC-110Y	D	Channel Y pressurizer level indication fluctuates approx. 4 – 5"	4/26/03	2200302231 (P5)
22 Boric Acid Pump	O	Pump has leak; boric acid under pump and around baseplate	4/28/03	2200302224 (P8)
2BKRS2-2401; 22 Cavity cooling fan breaker	D	Does not consistently recharge upon breaker closure	5/21/03	2200302510 (IE)
Main Turb GV-2 Position Indication	D	Linkage broken off at valve stem. Affects position indication, but not valve control	6/9/03	2200302793 (S3)
Main Turb GV-4 Position Indication	D	Linkage broken off at valve stem. Affects position indication, but not valve control	8/11/03	2200303302 (P8)
UNIT #2 MAIN TURBINE CONTROL	O	Reference and setter observed changing from 96-92% and back to 96% with no change in turbine load, 1 st stage press, or Governor vlv position, continue to monitor.	6/16/03	2200302859 (P1)
21 SGFP Local Speed Ind. @ 2C65	OOS	Intermittent failure	8/11/03	2200303375 (P1)
Flow to Break Alarm to 22 SG	D	1 of 2 power supplies for alarm function is failed (2-PT-4531B)	8/12/03	2200303378 (P1)
2-RE-5320B (Main vent skid)	OOS	Tripped off line due to low tritium flow	8/16/03	2200303421 (P9)
EHC HP Accumulator return to the reservoir	D	Numerous leaks (required fixed for PE 2-93-18-O-Q)	8/17/03	2200303417 (P5)
21 WT Sump Pp	OOS	Will not develop discharge pressure (CM 03-197)	8/19/03	2200303423 (S3)
CSAS alarm G-07 on 2C08	OOS	Faulty BL module TA 2-03-0025 prevents alarms	8/21/03	2200303429 (P8)
13 I/S Sump PP 21	OOS	Spray from discharge piping (CM 03-218)	9/18/03	2200303660 (P9)
21 HDP "A" oil pump	D	Oil leak	10/5/03	2200303763 (P9)
22 Gland Exh Fan	D	Noisier than normal – Vib analysis show motor bearings need replaced	10/16/03	2200303669 (P1)
23 Chg PP Disch PI (2PI2352)	D	Will not read < 250 psig	10/26/03	2200303893 (P3)
2-ES-1443-BTV	D	BTV for 26A FWH appears to be binding	10/26/03	2200304031 (IM)
25B FWH level cont	D	Maintains level low out of spec on TBO logs	11-02-03	2200304002 (S1)
21 SGFP	D	Reheat spikes	11/17/03	2200304177 (P1)
2-LS-6609 – 2DR12 line drn MOV LS	OOS	LS caused ground on 2Y09, leads lifted at level switch (CM 03-259)	11/30/03	2200304315 (P3)
2-SW-5163-CV	O	Stroked In the Alert Range	12/8/03	IR4-026-296

TECH SPEC EQUIPMENT		NON-TECH SPEC EQUIPMENT	
[O]	OPERABLE	[OOS]	OUT OF SERVICE
[I]	INOPERABLE	[D]	DEGRADED
[I/F]	INOPERABLE, BUT FUNCTIONAL		

SECTION 1 2 3 4 5				
SECTION 1	SECTION 2	SECTION 3	SECTION 4	SECTION 5
___ 2770 Pace	___ 2741 Lynch	___ 2667 Frye	___ 2897 Grooms	___ 2801 Shick
___ 2824 Umphrey	___ 1717 Hammans	___ 2671 Getz	___ 1899 Kelly	___ 2744 Martin, R.
___ 2898 Wilson			___ 2723 King	___ 2761 Naley
___ 0152 Gambill	___ 2279 Henry	___ 2902 Jones, T.	___ 0954 Gaines	___ 3036 McHale
	___ 2701 Hoffman	___ 2325 Love	___ 0813 Morgan	___ 2646 Beavers
___ 1881 Furfaro	___ 2633 Buckmaster	___ 0431 Cvetkovic	___ 0925 Fleegle	___ 2919 Hogg
___ 1619 Barton	___ 2651 Drumgoole	___ 2849 Douglas	___ 0756 Solomon	___ 0731 Lofton
___ 0411 Ford	___ 0555 Supanich	___ 0911 Kahl	___ 0824 McLaughlin	___ 0891 Miller
___ 1049 Smith	___ 1466 Triplett	___ 0423 Nehf	___ 2790 Henderson	___ 2563 Davis
				___ 2339 Penn
___ 2832 Wroten	___ 0912 Fredge	___ 2916 Carey	___ 2802 Shobert	___ 2720 Jones, R.
___ 2013 Boggs	___ 2632 Buckler	___ 1404 Burger	___ 2611 Baki	___ 2177 Huse
___ 0163 Lewis	___ 2513 Wall	___ 0362 Carroll	___ 0552 Van der Snick	___ 2734 Linehan
___ 1588 Papier	___ 2889 Sheran	___ 0100 Nukolczak	___ 0960 Truslow	___ 2191 Taubert
___ 2808 Steffe	___ 0591 Whitfield	___ 2998 Lankford	___ 2985 Mattingly	___ 2417 Cowan
___ 1515 Stanley	___ 2784 Quade	___ 0406 Ficke	___ 0820 Ruley	___ 0618 Blue
___ 0280 Kettler	___ 2443 Williams	___ 0959 Martin, J.	___ 1369 Sharpe	___ 0787 Sulick
___ 0021 Klecha	___ 0538 Rickards	___ 3115 McPherson	___ 2780 Ashburn	___ 2894 Martin, M.
___ 0443 Wilt	___ 0786 Ridgely	___ 0022 Branch	___ 3373 Woods	___ 2297 Allen
___ 0384 Dubois				
Safety Services	PDU	Dayshift	FIN	License Class
___ 3100 Gioffre	___ 2786 McCord	___ 1508 Riti	___ 2963 Gilligan	___ 0098 Bazyk
___ 0559 Tupik	___ 0744 Jones, C.	___ 1095 Hayden	___ 2729 Martinez	___ 2603 Eide
___ 1729 Lyson		___ 1682 Hummer		___ 0750 Darrow
___ 2705 Sloan		___ 1824 Fiore		___ 0493 Fleshman
___ 0041 Taylor		___ 0739 Allor		___ 0044 McNeil
___ 0795 Watson		___ 2708 Huber		___ 0046 Haller
___ 1313 Reckner		___ 0563 Suter		___ 2652 Etnoyer
		___ 2900 Hubbard		___ 1494 Rohloff
		___ 2733 Lavato		___ 0109 Heiska
		___ 2727 Korsnick		___ 1988 Robertson
		___ 2821 Fick		___ 1670 Leturno

Tagout Status Update Sheet

Equipment	Maintenance	Resp Group	Approx Hrs	Information	Status
Unit One & Common					
12 Pen Room Exhaust Fan	Lube and Inspect belts	M2	6	Require T. S. entry	W/C
U-1 MSIV Room Ventilation Belts	Inspect/Replace	M2	9	May require partial stroke of 12 MSIV	W/C
MPF Respirator Dryer Cabinet	Inspect and Lubricate Fan	M1	6		W/C

Unit Two					

SHIFT TURNOVER INFORMATION SHEET

LOWER MODE OPERATION CHECKLIST

NOTE:
To be completed whenever in Mode 5, 6, or Defueled

Unit No.: 2

CORE ALTERATIONS IN PROGRESS:

YES

NO

RCS CONDITIONS	
<i>Water Level</i>	178
<i>Temperature</i>	245
<i>Pressure</i>	3410
<i>Inventory</i>	Above RV Flange
<i>Time to Boiling</i>	N/A

BORATION FLOWPATHS (two required, one for Tech Specs, one for shutdown safety (NO-1-103):

Tech Spec. Flowpath: 21 RWT, SI-4142, 23 HPSI PP, SI-654, MAIN HPSI LOOP VLVs

Shutdown Safety Flowpath: 21 BAST, CVC-509, 23 CHG Pp, CVC-519

CONTINGENCY PLANS IN EFFECT:

Contingency Number	Plan Description

CONTAINMENT DEVIATIONS:

Penetration Description

Action

Resp. Individ.

CONTAINMENT CLOSURE STATUS:

- | | | |
|------------------------------------|--|--|
| Equipment Hatch | <input checked="" type="checkbox"/> OPEN | <input checked="" type="checkbox"/> CLOSED |
| Containment Outage Door (COD) | <input checked="" type="checkbox"/> OPEN | <input checked="" type="checkbox"/> CLOSED |
| Personnel Airlock (PAL) | <input checked="" type="checkbox"/> OPEN | <input checked="" type="checkbox"/> CLOSED |
| PAL Interlock Operable | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| Emergency Airlock (EAL) | <input checked="" type="checkbox"/> OPEN | <input checked="" type="checkbox"/> CLOSED |
| EAL Interlock Operable | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |
| Any Containment Closure Deviations | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |

CORE COOLING STATUS:

- | | | |
|--------------------------------------|--|--|
| Steam Generators | <input checked="" type="checkbox"/> 11(21) | <input checked="" type="checkbox"/> 12(22) |
| Shutdown Cooling | <input checked="" type="checkbox"/> 11(21) | <input checked="" type="checkbox"/> 12(22) |
| Refueling Pool >57' with UGS Removed | <input checked="" type="checkbox"/> YES | <input checked="" type="checkbox"/> NO |

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NEOP-301-3

SYSTEM: Nuclear Engineering Operating Procedures

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

PURPOSE: Evaluates an Operator's Ability to Determine if Adequate Shutdown Margin Exists With a Stuck Rod and the Plant in Mode 3

**JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING**

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE NEOP-301-3

ELEMENT STANDARD
 (* = CRITICAL STEP)

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:

15 MINUTES

ACTUAL TIME
TO COMPLETE JPM:

_____ MINUTES

TIME CRITICAL TASK:

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

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

DIRECTIONS TO EVALUATOR:

1. Read the "Directions to Trainee" to the trainee.
2. Note the time that the task is started. As the task proceeds, indicate completion of each element using the Standard criteria and the following notation:
 - "S" for satisfactory completion
 - "U" for unsatisfactory completion
 - "N" if not observed OR not verifiable

Critical elements must be observed or the evaluation is invalid.
3. When the Terminating Cue is reached, tell the trainee that no further actions are necessary. Note the completion time.
4. Document any instances of failure to comply with industrial safety practices, radiation safety practices and use of event free tools in the Notes area. Immediately correct any actions that could result in violation of a safety procedure or personnel injury. **NOTE: Violation of safety procedures will result in failure of the JPM.**
5. Questions to clarify actions taken should be asked after completion of the task.
6. Indicate whether the task was completed satisfactorily on the basis of correct performance of all critical elements and completion of the task within the Estimated Time to Complete for Time Critical tasks.
7. This JPM contains the steps, notes, cautions, and standards that are applicable to the initial conditions specified in this JPM. Steps that do not directly relate to this JPM, but appear in the procedure, are not listed here. It is the responsibility of the evaluator and/or observer to become familiar with the procedure prior to use of this JPM.

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE NEOP-301-3

ELEMENT**STANDARD**

(* = CRITICAL STEP)

8. Document any instances of when the near miss threshold was reached due to inappropriate personnel actions/inactions or procedural quality as a result of the following:

Reactivity Management

- Unplanned power changes > 1%
- Reduction of boron concentration of > 5% delta rho

Radiation Safety

- Preventable PCIs

Personnel Safety

- Operations near miss accident

Reactor Safety

- Automatic trip near miss
 - Actions required by operators to prevent an automatic trip
 - Valid RPS trip or pre-trip alarms due to a plant transient

Configuration Control

- Valve mispositioning or loss of control of tagging boundary resulting in loss of system inventory

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.

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

CUE: Boron Sample was taken one hour prior to the current time. If checked $T_{AVE} = 532^{\circ}F$.

<ul style="list-style-type: none"> · RCS average temperature (T_{avg}) is acceptable for current operating MODE. 	<p>Checks RCS average temperature and records it on attachment 2. Verifies temperature is acceptable for MODE 3.</p>
<ul style="list-style-type: none"> * _____ · 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. 	<p>Refers to figure in NEOP-13 and determines that required boron is 1121.3 (Unit 1 cycle 16).</p> <p>Records the following data on ATTACHMENT 2: Required boron NEOP-13 figure used RCS boron concentration, date and time of sample</p>
<ul style="list-style-type: none"> * ----- Informs CRS that RCS boron is less than required, and states that boration at greater than of equal to 40 GPM is required immediatley. 	<p>Completes the "Prepared BY" information and forwards the attachment to the CRS.</p>

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE NEOP-301-3

ELEMENT

STANDARD

(* = CRITICAL STEP)

TIME STOP _____

TERMINATING CUE:

This JPM is complete when the RCS boron is reported as less than required for SDM and boration is required. 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. **NOTE: Violation of safety procedures will result in failure of the JPM.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

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. **NOTE: Violations of safety procedures will result in failure of the JPM.**
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 to be untrippable.
 - d. AOP-1B has been implemented.
 - e. T_{AVE} is 532 °F
 - e. Core Burnup is 18,000 MWD/MTU.
 - f. RCS boron concentration is 1090 ppm.
 - g. You are performing the duties of the Unit-1 RO.
3. Initiating Cue: The CRS directs you to verify shutdown margin per NEOP 301. Are there any questions? You may begin.

6.1 SHUTDOWN MARGIN (All CEAs Operable) (Continued)

2. IF the RCS soluble Boron concentration is less than the required shutdown boron concentration for the current burnup, **THEN IMMEDIATELY START** boration at greater than or equal to 40 gpm of borated water at or above the higher of the concentrations below:
 - 2300 ppm, or
 - the required Shutdown Boron Concentration
3. **CONTINUE** to borate until the RCS soluble Boron concentration is greater than or equal to the required Shutdown Boron Concentration.

6.2 SHUTDOWN MARGIN (One Untrippable CEA), MODES 3, 4, OR 5

NOTE:

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

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

- RCS average temperature (T_{avg}) is acceptable for current operating MODE.

NOTE:

The values for 116% of SDM are only for use during a Steam Generator Tube Rupture Event. [B-58]

- A soluble boron concentration sample from the RCS has been obtained.
 - 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 (Figure 2-II.A.4 of NEOP-23)
- B. **INSTRUCT** a SRO to independently review the information in Attachment 2.
 - C. IF the RCS soluble boron concentration is less than the required shutdown boron concentration for the current burnup, **THEN IMMEDIATELY START** boration at greater than or equal to 40 gpm of borated water at or above the higher of the concentrations below:
 - 2300 ppm, or
 - the required Shutdown Boron Concentration
 - D. **CONTINUE** to borate until the RCS soluble Boron concentration is greater than or equal to the required Shutdown Boron Concentration.

FIGURE 1-II.A.4
SHUTDOWN BORON CONCENTRATION vs. BURNUP
MOST REACTIVE ROD STUCK OUT, NO XENON, EQUILIBRIUM SAMARIUM
BORON-10 DEPLETION INCLUDED

UNIT 1 CYCLE 16

(Page 3 of 3)

Burnup (^{MWD} / _{MTU})	Shutdown Boron Mode 3 & 4 (ppm)	Shutdown Boron Mode 5 (ppm)	Shutdown Boron Mode 3 & 4 ≥116% SDM (ppm)
10600	1647.6	1535.6	1911.2
10700	1641.3	1529.3	1903.9
10800	1635.0	1523.1	1896.6
10900	1628.6	1516.8	1889.2
11000	1622.3	1510.5	1881.8
11100	1615.9	1504.2	1874.4
11200	1609.5	1497.9	1867.0
11300	1603.0	1491.5	1859.5
11400	1596.6	1485.1	1852.0
11500	1590.1	1478.7	1844.5
11600	1583.6	1472.3	1837.0
11700	1577.1	1465.8	1829.4
11800	1570.5	1459.3	1821.8
11900	1563.9	1452.8	1814.2
12000	1557.4	1446.3	1806.5
12100	1550.7	1439.8	1798.9
12200	1544.1	1433.2	1791.2
12300	1537.5	1426.6	1783.5
12400	1530.8	1420.0	1775.7
12500	1524.1	1413.3	1767.9
12600	1517.4	1406.6	1760.1
12700	1510.6	1399.9	1752.3
12800	1503.9	1393.2	1744.5
12900	1497.1	1386.5	1736.6
13000	1490.3	1379.7	1728.7
13100	1483.4	1372.9	1720.8
13200	1476.6	1366.1	1712.8
13300	1469.7	1359.2	1704.8
13400	1462.8	1352.4	1696.8
13500	1455.9	1345.5	1688.8
13600	1448.9	1338.6	1680.8
13700	1442.0	1331.6	1672.7
13800	1435.0	1324.7	1664.6
13900	1428.0	1317.7	1656.4
14000	1420.9	1310.7	1648.3
14100	1413.9	1303.7	1640.1
14200	1406.8	1296.6	1631.9
14300	1399.7	1289.5	1623.7
14400	1392.6	1282.4	1615.4
14500	1385.4	1275.3	1607.1
14600	1378.3	1268.1	1598.8
14700	1371.1	1260.9	1590.5
14800	1363.9	1253.7	1582.1
14900	1356.6	1246.5	1573.7
15000	1349.4	1239.2	1565.3
15100	1342.1	1232.0	1556.9
15200	1334.8	1224.7	1548.4
15300	1327.5	1217.3	1539.9
15400	1320.1	1210.0	1531.4
15500	1312.8	1202.6	1522.8
15600	1305.4	1195.2	1514.3
15700	1298.0	1187.8	1505.7
15800	1290.5	1180.3	1497.0

Burnup (^{MWD} / _{MTU})	Shutdown Boron Mode 3 & 4 (ppm)	Shutdown Boron Mode 5 (ppm)	Shutdown Boron Mode 3 & 4 ≥116% SDM (ppm)
15900	1283.1	1172.9	1488.4
16000	1275.6	1165.4	1479.7
16100	1268.1	1157.8	1471.0
16200	1260.6	1150.3	1462.3
16300	1253.0	1142.7	1453.5
16400	1245.5	1135.1	1444.7
16500	1237.9	1127.5	1435.9
16600	1230.3	1119.9	1427.1
16700	1222.6	1112.2	1418.2
16800	1215.0	1104.5	1409.3
16900	1207.3	1096.8	1400.4
17000	1199.6	1089.0	1391.5
17100	1191.8	1081.3	1382.5
17200	1184.1	1073.5	1373.5
17300	1176.3	1065.6	1364.5
17400	1168.5	1057.8	1355.5
17500	1160.7	1049.9	1346.4
17600	1152.9	1042.0	1337.3
17700	1145.0	1034.1	1328.2
17800	1137.1	1026.2	1319.0
17900	1129.2	1018.2	1309.9
18000	1121.3	1010.2	1300.7
18100	1113.3	1002.2	1291.4
18200	1105.3	994.1	1282.2
18300	1097.3	986.1	1272.9
18400	1089.3	978.0	1263.6
18500	1081.3	969.8	1254.3
18600	1073.2	961.7	1244.9
18700	1065.1	953.5	1235.5
18800	1057.0	945.3	1226.1
18900	1048.8	937.1	1216.6
19000	1040.7	928.9	1207.2
19100	1032.5	920.6	1197.7
19200	1024.3	912.3	1188.2
19300	1016.0	904.0	1178.6
19400	1007.8	895.6	1169.0
19500	999.5	887.3	1159.4
19600	991.2	878.9	1149.8
19700	982.9	870.4	1140.2
19800	974.6	862.0	1130.5
19900	966.2	853.5	1120.8
20000	957.8	845.0	1111.0
20100	949.4	836.5	1101.3
20200	940.9	827.9	1091.5
20300	932.5	819.4	1081.7
20400	924.0	810.8	1071.8
20500	915.5	802.1	1062.0
20600	907.0	793.5	1052.1
20700	898.4	784.8	1042.1
20800	889.8	776.1	1032.2
20855	885.1	771.3	1026.7

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE NO-112 (2004)**

TASK: 204.143 Define Boundaries and check Requirements for Safety Tagging Clearances

PURPOSE: Evaluates an Operator's ability to verify clearance boundaries

**JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING**

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE NO-112 (2004)

ELEMENT STANDARD
 (* = CRITICAL STEP)

PERFORMER'S NAME: _____

APPLICABILITY:

RO and SRO

PREREQUISITES:

Completed qualifications as a Safety Tagger

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME
TO COMPLETE JPM:

10 MINUTES

ACTUAL TIME
TO COMPLETE JPM:

_____ MINUTES

TIME CRITICAL TASK:

NO

TASK LEVEL:

LEVEL 1

TOOLS AND EQUIPMENT:

Copy of tagout for 13 Charging Pump, 1200301099

REFERENCE PROCEDURE(S):

NO-1-112

TASK STANDARDS:

This JPM is complete when 13 charging pump tagging boundaries are deemed inadequate

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE NO-112 (2004)**

ELEMENT (* = CRITICAL STEP)	STANDARD
---------------------------------------	-----------------

TIME START _____

CUE: Provide the candidate with Clearance number 1200301099 package-(orange folder)

_____ Identify & locate NO-112	Same as element. (Candidate is not required to reference NO-1-112)
--------------------------------	--

B. Reviews (1st and 2nd)

___ The reviewers shall: <ul style="list-style-type: none"> • Ensure that the stub is properly completed. 	Verifies that coversheet is correctly completed.
--	--

<ul style="list-style-type: none"> • _____* Ensure that Clearance controls (especially boundaries) that have been or are to be, set by the associated Clearance Orders indicated on the stub are adequate for the work to be performed under the stub. 	Reviews Clearance Order CO-1 and identifies incorrect valve is recorded for 13 charging pump discharge valve.
---	---

TIME STOP _____

TERMINATING CUE: This JPM is complete when the candidate has determined tagging boundaries are inadequate. No further actions are required.

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE NO-112 (2004)

TASK: 078.001 Perform a Hand Calorimetric Calculation of Reactor Power

Document below any instances of failure to 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.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL
ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

COMMENTS:

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

SATISFACTORY

UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____

DATE: _____

5.7.B Stub Preparation (Continued)

3. Complete a Clearance Stub Index assigning a sequential alphanumeric (A1, B1, C1, etc...) to each stub.
 - If multiple stubs are required to complete the boundaries for a job, they shall be indicated on the Stub Index for all of the linked stubs.
 - If more stubs are required than fit on one Stub Index, then multiple Stub Indices shall be used.

5.8 Stub Approvals**A. General**

1. If additional stubs are required to be added to a Clearance after the initial planning, the reviewing Senior Safety Tagger shall verify that the Clearance controls are sufficient on any Clearance Orders for the additional work. The same level of detail shall be used in the preparation as was used in the original Clearance preparation, including re-checking applicable Prints/Drawings for DCNs.
 - DCNs that were not applicable previously may now be applicable.
 - Two Senior Safety Tagger reviews are always required.

B. Reviews (1st and 2nd)

1. The reviewers shall:
 - Ensure that the particular stub is properly completed.
 - Ensure that Clearance controls (especially boundaries) that have been, or are to be, set by the associated Clearance Orders indicated on the stub are adequate for the work to be performed under the stub.
 - Ensure adequate amplifying information has been supplied in the Comments field for the work to be performed, as defined in this procedure.
 - Ensure that the stub is properly listed on the Stub Index.
 - When the above requirements have been satisfied, sign the stub.

5.9 Clearance Order Preparation**A. General**

1. Any changes to a Clearance shall be approached with the same level of review and thought as used in the preparation of the original Clearance. This includes the use of drawings, physical walkdown, and the use of qualified technical personnel to evaluate Clearance boundaries. [B0564]

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE

TASK: 204.143

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. A tagout to repair 13 Charging Pump Discharge Desurger has been written.
 - b. You are performing the duties of the Unit 1 CRO.
3. Initiating Cue: The CRS has requested you to verify the tagout boundaries. Are there any questions? You may begin.

NWOR412

01/13/2004

***** WORK ORDER INFORMATION COPY *****

MO #: 1200301825



Unit: 1 IR #: Pri: 4
UEI: 1ACC233X EQP SR Cls: SR System: 041

Descr: 11 CHARGING PMP DESURGER

Tag Loc: CR Tag Hung:

Mode: 1

----- JOB SCOPE -----

OVER-HAUL 11,12, OR 13 CHARGING PUMP DISCHARGE DESURGER, THIS REPTASK
GENERATED MWO CAN BE USED FOR ANY ONE OF THE DISCHARGE DESURGERS AS
DETERMINED BY MAINTENANCE REQUIRED

----- PROBLEM / WORK REQUESTED -----

OVER-HAUL 11,12 OR 13 CHARGING PUMP DISCHARGE DESURGER

Initiator: HANCE,G.

----- REQUIRED INDICATORS -----

QV Call# Req'd: N Safety Tag Req'd: F MO Sfty Cls: SRN0
SWP: XX-110 Dose Est: .014 Eqp OOS Dur: 14
XX-2
XX-4

Account #: N00401-0002 Rep Task ID: 10412147 IST Req'd: NO

Repeat Trend:

ZZ RMGS VERIFIED - NO REPEAT ACTIVITIES IDENTIFIED

Freq: Freq of Time: Reptask LED: Revised LED:

----- RISK CLASSIFICATION -----

Risk Classification:

RADIOLOGICAL LOW RISK
RADIOLOGICAL MEDIUM RISK

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01/13/2004

***** WORK ORDER INFORMATION COPY *****

MO #: 1200301825



----- PERMITS -----

<u>Type</u>	<u>Description</u>	<u>Permit #</u>
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	XX-110
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	XX-2
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	XX-4

***** WORK ORDER INFORMATION COPY *****

MO #: 1200301825



R A D I A T I O N S A F E T Y P L A N N E R #####
PLANNER: B.WILEY X6706 02/20/2003

OVERHAUL OF THE DISCHARGE DESURGER IS EVALUATED AS RADIOLOGICAL MEDIUM RISK DUE TO CONTAMINATION LEVELS >300K DPM/100CM2.

**** GENERAL INFORMATION ****

- MINIMUM MANDATORY ACTIONS REQUIRED TO MANAGE RMR ARE:
- 2. PREPARATION OF RP 1-102 ATTACHMENT 6, PRE-JOB BRIEFING CHECKLIST.
 - 7. WORK SHALL BE PERFORMED UNDER AN SWP DESIGNED TO SUPPORT JOB TASKS.
 - 8. PROVIDE SUPERVISORY MONITORING OF WORK.
 - 12.RGS SHALL CONSIDER THE USE OF PEER CHECKS.

THE LEAD TECHNICIAN/CRAFTSMAN IS RESPONSIBLE FOR CONDUCTING THE PRE-JOB BRIEF. REFERENCE RP 1-102 TO IDENTIFY THE NECESSARY PERSONNEL WHO ARE REQUIRED TO ATTEND.

THIS WORK MAY BE PERFORMED AS RADIOLOGICAL LOW RISK IF CONTAMINATION LEVELS ARE <300K DPM/100cm2.

rp 1-102, att 2, completed

*****CHEMISTRY PLANNER*****
RON THOMAS X 6970

ENSURE ALL CH-1-102 REQUIREMENTS FOR CLASS B CLEANLINESS IS COMPLIED WITH.
REVIEW COMPLETE

NWOR412

01/13/2004

***** WORK ORDER INFORMATION COPY *****

MO #: 1200301825



----- JOB STEPS -----

Step: 10 Sub: 1

Craft: M1

OBTAIN TAG OUT.

11 CHARGING PUMP: _____

12 CHARGING PUMP: _____

13 CHARGING PUMP: _____

Step: 20 Sub: 1

Craft: M1

OVER-HAUL 11,12 OR 13 CHARGING PUMP DISCHARGE DESURGER IAW CVCS-02 PROCEDURE.

DOCUMENT IN THIS MWO WHICH CHARGING PUMP DESURGER WAS OVER-HAULED.

11 CHARGING PUMP: _____

12 CHARGING PUMP: _____

13 CHARGING PUMP: _____

Step: 30 Sub: 1

Craft: M1

CLEAR TAG OUT.

REMOVE DEFICIENCY TAG(S) AS REQUIRED.

11 CHARGING PUMP: _____

12 CHARGING PUMP: _____

13 CHARGING PUMP: _____

Step: 40 Sub: 1

Craft: M1

----POST MAINTENANCE TESTING----

WITH THE SYSTEM RETURNED TO SERVICE VERIFY VISUALLY NO WATER LEAKAGE EXIST AT DISTURBED JOINTS.

VERIFY CHARGING PUMP OPERATES SAT.

NWOR412

01/13/2004

***** WORK ORDER INFORMATION COPY *****

MO #: 1200301825



11 CHARGING PUMP: _____

12 CHARGING PUMP: _____

13 CHARGING PUMP: _____

PMT RESULTS: S U W

Performed By:

----- ACTION TAKEN -----

REQUIREMENTS: DATE AND SIGN EACH ENTRY. DOCUMENT QV CALL # WHEN APPLICABLE.

SEE HARD COPY OR IMAGED COPY FOR ACTION TAKEN INFORMATION.

NWOR412

01/13/2004

***** WORK ORDER INFORMATION COPY *****

MO #: 1200301825



----- RECOMMENDED OPS TEST SECTION -----

IF ANY OF THE TESTS ARE UNSATISFACTORY ENTER THE NEW MO# OR IR#

NewIR: NewMO:
NewIR: NewMO:

RECOMMENDED OPS TEST

OPS Code: T024 Mode Code: 1 Result Code: S

Recommended:

- 1) PERFORM 15 MINUTE TEST RUN CHARGING PUMP
 - 11 CHG PP _____
 - 12 CHG PP _____
 - 13 CHG PP _____

- 2) VERIFY PROPER OPERATION PER OI-2A-1
 - 11 CHG PP _____
 - 12 CHG PP _____
 - 13 CHG PP _____

TEST PERFORMED

RESULTS (S,U,W) ___

REASONS FOR UNSAT / WAIVED TEST

***** WORK ORDER INFORMATION COPY *****

MO #: 1200301825



----- SAFETY TAG BOUNDARY -----

M1- COMPLETELY ISOLATE THE CHARGING SYSTEM ASSOCIATED WITH 11,12 OR 13 CHARGING PUMP TO ALLOW OVER-HAUL OF THE DISCHARGE DESURGER

NOTE: This Reptask generated MWO can be used for any one of the discharge desurgers as determined by maintenance required

*****OPS PLANNER REVIEW*****

- 02/21/2003 RANDY HOLT X3556:
- 11 CHG PP REFERENCE CR# 1200201158
- 12 CHG PP REFERENCE CR# 1200105156
- 13 CHG PP REFERENCE CR# 1200200697

----- EQUIPMENT LIST -----

Equip ID: 1ACC233X Descr: 11 CHARGING PMP DESURGER
 System: 041 Eqp SR Cls: SR EQ: N LLRT: N TECH SPEC: N
 Location: UNIT 1 CHARGING PUMP ROOM

----- CONTROL DOCUMENTS -----

Doc ID	Rev	LstRv	Type	Description	Chg #
12840-0003SH0002	0008	0008	BGEDRWG	COMPANY DRAWINGS	N 1
CVCS-02	1002	1002	MMP	MECHANICAL MAINTENANCE PROCEDURE	N 1



Clearance ID

1200301099

CLEARANCE ORDER CO-1

System No: 041 System Description CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Scope/Comments for Clearance Order:

Rev: 0

Boundaries for 13 Chg pp

Reviews

1st Review: Information Only Date/Time: _
 2nd Review: Date/Time: _
 Order App'd: Date/Time: _

Stub ID	MO	RMG	Accepted by	Date/Time

Order Completed Date/Time:





Clearance ID

1200301099

CLEARANCE ORDER CO-1

Seq	1			N	Color	Tag No.
INSTRUCTION		Eqp Id	Hang Pos	Norm Pos	Restore Pos	
Description						
Location						
ENSURE 13 CHG Pp ISOLATED and DRAINED IAW OI-2A Sect 6.27.						
Note/Instruction						
Tagger/Date	N/A		Verifier/Date			

Seq	2			Y	Color	Tag No.
1HS224		Eqp Id	SEE NOTE *	Hang Pos	TAG REMOVED	Norm Pos
Restore Pos						
Description						
U-1 CVC CHG PP SEL HS						
Location						
CR 1C07						
*13 CHG PP OOS FOR MAINTENANCE						
Note/Instruction						
Tagger/Date	N/A		Verifier/Date			

Seq	3			Y	Color	Tag No.
1HS224Z		Eqp Id	PTL	Hang Pos	NORMAL	Norm Pos
Restore Pos						
Description						
13 CVC CHG PP CNTRL HS						
Location						
CR 1C07						
*13 CHG PP OOS FOR MAINTENANCE						
Note/Instruction						
Tagger/Date	N/A		Verifier/Date			

Seq	4			N	Color	Tag No.
INSTRUCTION		Eqp Id	Hang Pos	Norm Pos	Restore Pos	
Description						
Location						
PLACE RED DOT ON ANNUNCIATOR WINDOWS F43 & F44 @ 1C07						
Note/Instruction						
Tagger/Date	N/A		Verifier/Date			





Clearance ID

1200301099

CLEARANCE ORDER CO-1

Seq	5					Y	Color	Tag No.
	1ANNF43	Eq Id	PULLED	Hang Pos	INSTALLED	Norm Pos		Restore Pos
13 CHG PP - *SIAS BLOCKED - *AUTO START								
U-1 CSR, 1K01								
*13 CHG PP OOS FOR MAINTENANCE								
Tagger/Date	N/A		Verifier/Date					

Seq	6					Y	Color	Tag No.
	1ANNF44	Eq Id	PULLED	Hang Pos	INSTALLED	Norm Pos		Restore Pos
13 CHG PP - BKR L/U - IMPR								
U-1 CSR, 1K01								
*13 CHG PP OOS FOR MAINTENANCE								
Tagger/Date	N/A		Verifier/Date					

Seq	7					R	Color	Tag No.
	1BKR52-1104	Eq Id	L/DISC	Hang Pos	CONNECTED	Norm Pos		Restore Pos
NO. 13 CHARGING PUMP								
UNIT 1 - 27' SWITCHGEAR ROOM								
Note/Instruction								
Tagger/Date			Verifier/Date					

Seq	8					R	Color	Tag No.
	1BKR52-1404	Eq Id	L/DISC	Hang Pos	CONNECTED	Norm Pos		Restore Pos
NO. 13 CHARGING PUMP								
UNIT 1 - 45' SWITCHGEAR ROOM								
Note/Instruction								
Tagger/Date			Verifier/Date					





Clearance ID

1200301099

CLEARANCE ORDER CO-1

Seq	9			R	Color	Tag No.
	1-CVC-170	Eq Id	SHUT	Hang Pos	LOCKED OPEN	Norm Pos
						Restore Pos
	12 CHG PP SUCT					Description
	@ 12 CHG PP					Location
						Note/Instruction
	Tagger/Date		Verifier/Date			

Seq	10			R	Color	Tag No.
	1-CVC-176	Eq Id	SHUT	Hang Pos	LOCKED OPEN	Norm Pos
						Restore Pos
	13 CHG PP SUCT					Description
	@ 13 CHG PP					Location
						Note/Instruction
	Tagger/Date		Verifier/Date			

Seq	11			Y	Color	Tag No.
	1-CVC-180	Eq Id	OPEN	Hang Pos	SHUT	Norm Pos
						Restore Pos
	13 CHG PP DISCH DRN					Description
	@ 13 CHG PP					Location
	MBOB OPS/TAGGING/CRAFT AS REQUIRED					Note/Instruction
	Tagger/Date		N/A	Verifier/Date		

Seq	12			Y	Color	Tag No.
	1-CVC-181	Eq Id	OPEN	Hang Pos	SHUT	Norm Pos
						Restore Pos
	13 CHG PP DISCH DRN B/U					Description
	@ 13 CHG PP					Location
	MBOB OPS/TAGGING/CRAFT AS REQUIRED					Note/Instruction
	Tagger/Date		N/A	Verifier/Date		





Clearance ID

1200301099

CLEARANCE ORDER CO-1

Seq	13			Y		Tag No.	
	1-CVC-179	Eqp Id	OPEN	Hang Pos	SHUT	Norm Pos	Restore Pos
13 CHG PP SUCT DRN						Description	
@ 13 CHG PP						Location	
MBOB OPS/TAGGING/CRAFT AS REQUIRED						Note/Instruction	
Tagger/Date	N/A		Verifier/Date				





Clearance ID

1200301099

CLEARANCE COVERSHEET

System No: 041 **System Description** CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Reason/Comments

TRAINING ONLY
DO NOT USE FOR ACTUAL PLANT OPERATIONS

Repair 13 chg pp discharge desurger

PreClearance Activity:
Ensure 13 Chg pp is secured iaw OI-2A.

This is a single valve high energy system.

Clearance Preparation

Rad Con/Chem Notification X Fire Protection Notification Containment Integrity FOWL	Trip Sensitive LLRT Pre-Clearance Activities X	Annunciation Affected X High Energy X Tech Spec/TRM X Standard
Prepared by: <u>TUPIK, JUSTIN R</u>		Date/Time: <u>12/22/2003 12:39</u>
High Energy Approval		Date/Time:

Associated Equipment

Equipment ID	Equipment Description

1200301099





Clearance ID 1200301099
STUB INDEX

System No: 041 System Description: CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Stub ID	MO	RMG	Linked with Clrnc#-StubID	Issued	Returned	Stat
A1		M1				N

1200301099





Clearance ID

1200301099

CLEARANCE REFERENCES

System No 041 System Description CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Associated Maintenance Orders, etc.

Maintenance Order	Job Description
10412147	OVER-HAUL 11,12 OR 13 CHARGING PUMP DISCHARGE DESURGER

Associated NORMS Documents

Document ID	Rev	Document ID	Rev
60730SH0002-2004SH0001			
61087SH0013B	0066		
60730SH0002-2004SH0003			
61009	0037		
12968-0145SH0001	0001		
60730SH0002-2006SH0003			
FSK-MP-1873-2002SH0001			
61075SH0023B	0013		
60730SH0002	0064		
12840-0003SH0002	0008		
FSK-MP-1873	0016		

1200301099



CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE ERPIP-105 (2004)

TASK: Recall the Emergency Response Organization

PURPOSE: Evaluates an Operator's ability to recall the ERO per ERPIP 105

**JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING**

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ERPIP-105 (2004)

ELEMENT STANDARD
 (* = CRITICAL STEP)

PERFORMER'S NAME: _____

APPLICABILITY:

RO and SRO

PREREQUISITES:

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

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME
TO COMPLETE JPM:

15 MINUTES

ACTUAL TIME
TO COMPLETE JPM:

_____ MINUTES

TIME CRITICAL TASK:

NO

TASK LEVEL:

LEVEL 1

TOOLS AND EQUIPMENT:

Working copies of ERPIP 3.0 Attachment 3, marked up as required, and ERPIP 105 Attachment 1

REFERENCE PROCEDURE(S):

Immediate Actions ERPIP 3.0

Control Room Communicator ERPIP 105

TASK STANDARDS:

This JPM is complete when the recall notification has been completed using both the CAN System and the Pager System.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ERPIP-105 (2004)**

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

TIME START _____

CUE: Provide a copy of ERPIP-3.0 Attachment 3, ERPIP-105 section 6.2 to the examinee.

Locates ERPIP-105 section 6.2. Same as element

6.2 Operation

A. PERFORM Control Room Communicator functions as follows:

CUE: Provide a copy of ERPIP-105 Attachment 1 to the examinee

* 1. IF directed to notify Emergency Response Organization personnel, THEN GO TO Attachment 1, Personnel Notification.	Locates ERPIP-105, Attachment 1
---	------------------------------------

ATTACHMENT 1, PERSONNEL NOTIFICATION

NOTE TO EXAMINER: Examinee will complete ATTACHMENT 1 per the KEY

* STEP 1: RECORD TWO DIGIT EVENT CODE: ()	Records 68, from ERPIP Attachment 3, block 7.
* STEP 2: PROVIDE PAGER MESSAGE AS DETERMINED BY THE EVENT OR AS DIRECTED BY THE SHIFT MANAGER/SEC	Records information on table for A, B and C as indicated on KEY.

Step 3: CONTACT THE CAN SYSTEM

CUE: Instruct the examinee to simulate dialing the phone number in step A, below. The examiner will role-play the CAN System messages.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ERPIP-105 (2004)**

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

* <u> </u> A. CALL CAN System using <i>one</i> of the numbers listed below 1. 8-1-800-552-4226 2. 8-1-877-786-8478 3. 8-1-800-992-2331
* <u> </u> B. PROVIDE message: "This is to report an incident at Calvert Cliffs Nuclear Power Plant."

Examinee dials any of the listed numbers using any Control Room phone which is specifically designated for a special purpose-(does not use phones located behind the CRS desk)

States message as written

CUE: Provide examinee your name as contacted person and request a password after examinee ask for a name.

* <u> </u> C. NOTE time, date and person contacted
* <u> </u> D. WHEN requested, THEN PROVIDE the password (Calvert Cliffs)

Writes time, date and person contacted on form

States password as "Calvert Cliffs)

 E. INDICATE if this contact is: not a drill

Examinee may state "this is" or "this is not" a drill.

* <u> </u> F. Provide the 2-digit event code. (68)
* <u> </u> G. PROVIDE the 6-digit pager message. (111 (2) (2) (2)) A B C

States "event code is six eight"

States "pager message is 111 2 2 2."

STEP 4: VALIDATE THE INFORMATION

CUE: Evaluator, repeat back the information from step 3, requested by the examinee. After the 6-digit pager message, request the phone number they are calling from.

<u> </u> A. Ask the CAN Operator to repeat if the event is: a drill not a drill	Same as element
<u> </u> B. Ask the CAN Operator to repeat back the 2-digit event code:	Same as element

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE ERPIP-105 (2004)

ELEMENT

STANDARD

(* = CRITICAL STEP)

<p>___ C. Ask the CAN Operator to repeat back the 6-digit pager message:</p> <p style="text-align: center;">(111 (2) (2) (2))</p> <p style="text-align: center;">A B C</p>	<p>Same as element</p>
<p>___ D. WHEN prompted, THEN PROVIDE the phone number you are calling from: _____.</p>	<p>Reports the phone number.</p>

STEP 5: MANUALLY ACTIVATE THE PAGER SYSTEM

<p>* ___ A. DETERMINE the Pager ID Number from the Radio Pager Activation Table of this attachment _____</p>	<p>Records 0050022 in this block</p>
<p>* ___ B. CALL Pager Activation System at 6700 or 1-866-229-6054</p>	<p><u>Simulates</u> calling either number.</p>

CUE: After the examinee simulates dialing the number, ask for the pager ID number.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ERPIP-105 (2004)**

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

* C. WHEN prompted, THEN ENTER the pager ID number from step 5.A.	Enters 0050022
---	----------------

CUE: After the examinee enters the pager ID number, tell the examinee he has heard 3 beeps.

<p>* D. WHEN one of the following conditions occur, THEN ENTER the 6-digit number in step 2: (111 () () ())</p> <p align="center">A B C</p> <p>1. Prompted to enter your pager</p> <p align="center">OR</p> <p>2. Following the 3 beeps</p>	Enters 111 2 2 2.
---	-------------------

* E. INFORM SM and Security (4696) that the Recall System has been activated.	Informs Shift Manager and Security that the Recall System has been activated.
---	---

TERMINATING CUE: This JPM is complete when the CAN and the Pager Systems have been activated. No further actions are required.

TIME STOP

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE ERPIP-105 (2004)

TASK: Recall the Emergency response Organization

Document below any instances of failure to comply with industrial safety practice, radiation safety practices and use of event free tools. **NOTE: Violation of safety procedures will result in failure of the JPM.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

COMMENTS:

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

SATISFACTORY

UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

KEY

ATTACHMENT 1, PERSONNEL NOTIFICATION

Page 1 of 2

COMMUNITY ALERT NETWORK (CAN)

REQUIREMENTS FOR CAN NOTIFICATION

Notification to CAN and Pager Activation System should occur only when:

- 1. directed by the SM or SEC for event notification.
2. it is the first notification required for any Emergency Classification, or
3. it is an upgrade from any Emergency Classification.

STEP 1: RECORD TWO DIGIT EVENT CODE: (68)

STEP 2: PROVIDE PAGER MESSAGE AS DETERMINED BY THE EVENT OR AS DIRECTED BY THE SHIFT MANAGER/SEC

Table with 3 rows (A, B, C) and 3 columns: Description, Checklist, and Copy # checked here. Includes handwritten '2' and 'A (Used for step 3 and 5)' etc.

STEP 3: CONTACT THE CAN SYSTEM

A. CALL the CAN System using one of the numbers listed below:

- 1. 8-1-800-552-4226 2. 8-1-877-786-8478 3. 8-1-800-992-2331

B. PROVIDE message: "This is to report an incident at Calvert Cliffs Nuclear Power Plant."

C. NOTE time, date and person contacted:

Time: _____ Date: _____ Person Contacted: _____

D. WHEN requested, THEN PROVIDE the password (Calvert Cliffs).

E. INDICATE if this contact is: [] a drill [x] not a drill.

F. PROVIDE the 2-digit event code: (68)

G. PROVIDE the 6-digit pager message: (111 (2) (2) (2))

STEP 4: VALIDATE THE INFORMATION

A. ASK the CAN Operator to repeat if the event is: [] a drill [x] not a drill.

B. ASK the CAN Operator to repeat back the 2-digit event code: (68)

C. ASK the CAN Operator to repeat back the 6-digit pager message: (111 (2) (2) (2))

D. WHEN prompted, THEN PROVIDE the phone number you are calling from:

(not critical)

ATTACHMENT 1, PERSONNEL NOTIFICATION

Page 2 of 2

STEP 5: MANUALLY ACTIVATE THE PAGER SYSTEM

- A. DETERMINE the Pager ID Number from the Radio Pager Activation Table of this attachment: 005022
- B. CALL Pager Activation System at 6700 or 1-866-229-6054.
- C. WHEN prompted, THEN ENTER the Pager ID Number from step 5.A.
- D. WHEN one of the following conditions occur,
1. Prompted to enter your pager.
- OR
2. Following the 3 beeps.
- THEN ENTER the 6-digit number determined in step 2: (111 (2) (2) (2)) followed by the # sign.
- A B C
- E. INFORM SM/SEC and Security (4696) that the Recall System has been activated.

RADIO PAGER ACTIVATION TABLE			
Condition	Pager ID Number	Telephone No.	Positions Being Contacted
General Emergency OR Site Emergency OR Alert OR Severe Weather	0050022	111 (2) (2) (2) A B C	All Emergency Organization Pager Holders
Unusual Event	0072123	111 () () () A B C	<ul style="list-style-type: none"> • Site Emergency Coordinator, • Plant General Manager, • Superintendent-Nuclear Operations, • Radiological Assessment Director, • Radiation Protection Director, • Nuclear Fuel Management Unit, • Public Information Support Manager, Emergency Planning Representative

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE

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.
2. Initial Conditions:
 - a. A Loss of Offsite Power event has occurred and Unit-2 has no Diesel Generators in operation.
 - b. The Shift Manager has declared a Site Emergency due to the Station Blackout on Unit-2
 - c. The dedicated Control Room Communicator is making the Initial Notification to offsite agencies per the ERPIP.
 - d. You are an extra Control Room operator.
3. Initiating Cue: The Shift Manager has directed you to recall the normal Emergency Response Organization per ERPIP 105
Are there any questions? You may begin.



IMMEDIATE ACTIONS

ERPIP

ATTACHMENT 3, INITIAL NOTIFICATION FORM

USE THIS FORM FOR INITIAL NOTIFICATION AND EMERGENCY CLASS
UPGRADING AND DOWNGRADING ONLY

Form instructions are on back

A. COMPLETE ITEMS 1 THROUGH 15

1. This is / (s not) an exercise. (circle one)	8. Radioactivity: <input checked="" type="checkbox"/> Has Not Been Released <input type="checkbox"/> Is Being Released: <input type="checkbox"/> From The Plant <input type="checkbox"/> In The Plant <input type="checkbox"/> Has Been Released: <input type="checkbox"/> From The Plant <input type="checkbox"/> In The Plant																																			
2. Caller's Name:	9. Type of Release: <input checked="" type="checkbox"/> None <input type="checkbox"/> Airborne <input type="checkbox"/> Waterborne <input type="checkbox"/> Surface Spill																																			
3. Title/Organization: CCNPP	10. Population Affected: <input checked="" type="checkbox"/> None <input type="checkbox"/> Yes																																			
4. Facility: Calvert Cliffs Nuclear Power Plant	11. Protective Action Recommended (Choose one only): <input checked="" type="checkbox"/> None <input type="checkbox"/> Shelter entire 10 mile EPZ <input type="checkbox"/> Evacuate PAZ 1 unless conditions make evacuation dangerous, notify the public in PAZ 1 to take KI, shelter remainder of the 10 mile EPZ. <input type="checkbox"/> Evacuate PAZ 1 & 3 unless conditions make evacuation dangerous, notify the public in PAZ 1 & 3 to take KI, shelter remainder of the 10 mile EPZ. <input type="checkbox"/> Evacuate PAZ 1, 2, & 3 unless conditions make evacuation dangerous, notify the public in PAZ 1, 2, & 3 to take KI, shelter remainder of the 10 mile EPZ. <input type="checkbox"/> Evacuate PAZ 1 & 2 unless conditions make evacuation dangerous, notify the public in PAZ 1 & 2 to take KI, shelter remainder of the 10 mile EPZ.																																			
5. Emergency Class: <input type="checkbox"/> None <input type="checkbox"/> Unusual Event <input type="checkbox"/> Alert <input checked="" type="checkbox"/> Site Emergency <input type="checkbox"/> General Emergency	12. This is / (s not) an exercise. (circle one)																																			
6. Time Declared: <u>5:10 PM</u> Date: <u>Today</u>																																				
7. Nature of Incident: <input type="checkbox"/> None Enter EAL Code (<u>E S I</u>) Circle EAL Number N/A <u>1</u> 2 3 4 5 6 Enter two digit event code: (<u>6 8</u>)																																				
13. <u>Nick Lavato</u> <u>Nevada</u> <i>Printed Name & Signature</i>																																				
14. Initial Notification completed by (circle one): <u>SM</u> PGM GS-NPO SEC																																				
15. GIVE form to Communicator.																																				
1. NOTIFY agencies a through e below. GIVE items 1 through 12 above in order. Use conference feature on dedicated phone. IF conferencing feature is not available, THEN use (in order of preference): back-up (B/U) conference button on dedicated phone, individual buttons on dedicated phone, OR any outside line phone, OR radio.																																				
2. LOG time and name of receiving communicator and indicate the method used to transmit notification.																																				
NOTE During off-hours, Maryland Emergency Management Agency (MEMA) and Maryland Department of the Environment (MDE) emergency centers are not staffed. Phone will not be answered. Maryland State Police (MSP) receives calls for MEMA off-hours. MSP then notifies MEMA. MEMA will forward information to MDE until offices are manned.																																				
<table border="1"> <thead> <tr> <th>LOCATION</th> <th>TIME</th> <th>RECEIVED BY</th> <th>DEDICATED PHONE</th> <th>RADIO</th> <th>OUTSIDE LINE</th> </tr> </thead> <tbody> <tr> <td>a. CALVERT</td> <td></td> <td></td> <td></td> <td></td> <td>(410-535-3491)</td> </tr> <tr> <td>b. ST. MARY'S</td> <td></td> <td></td> <td></td> <td></td> <td>(301-475-8016)</td> </tr> <tr> <td>c. DORCHESTER</td> <td></td> <td></td> <td></td> <td></td> <td>(410-228-2222)</td> </tr> <tr> <td>d. MEMA (or MSP)</td> <td></td> <td></td> <td></td> <td></td> <td>(410-517-3600)</td> </tr> <tr> <td>e. MDE (MEMA or MSP)</td> <td></td> <td></td> <td></td> <td></td> <td>(410-537-3975)</td> </tr> </tbody> </table>	LOCATION	TIME	RECEIVED BY	DEDICATED PHONE	RADIO	OUTSIDE LINE	a. CALVERT					(410-535-3491)	b. ST. MARY'S					(301-475-8016)	c. DORCHESTER					(410-228-2222)	d. MEMA (or MSP)					(410-517-3600)	e. MDE (MEMA or MSP)					(410-537-3975)
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** NOTIFY the NRC immediately after the above agencies have been notified.**																																				
f. NRC <u>3:11 PM</u> (301-816-5100)																																				
3. RECORD time all calls to above agencies were completed:																																				
4. <i>Printed Name & Signature</i>																																				



ERPIP

6.0 PERFORMANCE

6.1 Activation

- A. The person assigned by the Shift Manager/Control Room Supervisor shall carry out these actions until relieved by the full-time Control Room Communicator.
1. When relieved, the interim communicator should report to the Shift Manager/Control Room Supervisor for reassignment.

6.2 Operation

- A. **PERFORM** Control Room Communicator functions as follows:

NOTE

Dedicated Communicator and Supervisor Nuclear Operator's Speed Dial telephones are located on an equipment cart behind 1C17/18/19. If desired, Speed Dial telephones can be moved to the CRS desk by plugging phones into designated jacks located on the back of the cabinet behind the CRS desk.

These actions assume that Dedicated Offsite Agency phones and/or standard telephones are operable. If these circuits are not operable then communications must be by radio (See ERPIP 901, Communicators Equipment, for radio operation instructions).

1. **IF** directed to notify Emergency Response Organization personnel, **THEN GO TO** Attachment 1, Personnel Notification. [B-1]
 - a. The above action may be delegated. [B-1]
 2. **IF** directed to send *any* of the following, **THEN GO TO** Attachment 2, Offsite Agency Notifications:
 - Attachment 3, Initial Notification Form
 - Attachment 4, Follow-Up Communications Form
 - Attachment 5, Detailed Follow-Up Communications Form
 3. **IF** answering or placing calls that are not Offsite Agency Notifications or Personnel Notifications, **THEN GO TO** Attachment 6, General Telephone Communications.
- B. **REFER** to the following attachments as needed to complete tasks:
- Attachment 7, Dedicated Offsite Agency Telephone
 - Attachment 8, Speed Dial Telephone
 - Attachment 9, Emergency Message

ATTACHMENT 1, PERSONNEL NOTIFICATION

Page 2 of 2

STEP 5: MANUALLY ACTIVATE THE PAGER SYSTEM

- A. **DETERMINE** the Pager ID Number from the Radio Pager Activation Table of this attachment: _____
- B. **CALL** Pager Activation System at 6700 or 1-866-229-6054.
- C. **WHEN** prompted, **THEN ENTER** the Pager ID Number from step 5.A.
- D. **WHEN** one of the following conditions occur,
1. Prompted to enter your pager.

OR

2. Following the 3 beeps.

THEN ENTER the 6-digit number determined in step 2: (111 () () ()) followed by the # sign.

A B C

- E. **INFORM** SM/SEC and Security (4696) that the Recall System has been activated.

RADIO PAGER ACTIVATION TABLE			
Condition	Pager ID Number	Telephone No.	Positions Being Contacted
General Emergency OR Site Emergency OR Alert OR Severe Weather	0050022	111 () () () A B C	All Emergency Organization Pager Holders
Unusual Event	0072123	111 () () () A B C	<ul style="list-style-type: none"> Site Emergency Coordinator, Plant General Manager, Superintendent-Nuclear Operations, Radiological Assessment Director, Radiation Protection Director, Nuclear Fuel Management Unit, Public Information Support Manager, Emergency Planning Representative

ATTACHMENT 1, PERSONNEL NOTIFICATION

Page 1 of 2

COMMUNITY ALERT NETWORK (CAN)

REQUIREMENTS FOR CAN NOTIFICATION

Notification to CAN and Pager Activation System should occur only when:

1. directed by the SM or SEC for event notification.
2. it is the first notification required for any Emergency Classification, or
3. it is an upgrade from any Emergency Classification.

STEP 1: RECORD TWO DIGIT EVENT CODE: ()

STEP 2: PROVIDE PAGER MESSAGE AS DETERMINED BY THE EVENT OR AS DIRECTED BY THE SHIFT MANAGER/SEC

A. This:	1. <input type="checkbox"/> is a drill. 2. <input type="checkbox"/> is not a drill. 5. <input type="checkbox"/> previous pager error.	Copy # checked here: _____ A (Used for step 3 and 5)
B. Involving:	1. <input type="checkbox"/> Unit 1. 2. <input type="checkbox"/> Unit 2. 3. <input type="checkbox"/> Both units (or ISFSI) 5. <input type="checkbox"/> Previous pager error.	Copy # checked here: _____ B (Used for step 3 and 5)
C. Responders report to:	1. <input type="checkbox"/> No action required. 2. <input type="checkbox"/> Staff normal ERF (TSC, EOF, OSC, MC). 3. <input type="checkbox"/> Staff alternate emergency duty location (For Security events or SM/SEC discretion). 5. <input type="checkbox"/> Previous pager error. 6. <input type="checkbox"/> Staff TSC/OSC only (discretion of SM/SEC). 8. <input type="checkbox"/> Precautionary staff ERF (discretion of SM/SEC, i.e., severe weather prep)	Copy # checked here: _____ C (used for step 3 and 5)

STEP 3: CONTACT THE CAN SYSTEM

- A. **CALL** the CAN System using one of the numbers listed below:
1. 8-1-800-552-4226 2. 8-1-877-786-8478 3. 8-1-800-992-2331
- B. **PROVIDE** message: "This is to report an incident at Calvert Cliffs Nuclear Power Plant."
- C. **NOTE** time, date and person contacted:
Time: _____ Date: _____ Person Contacted: _____
- D. **WHEN** requested, **THEN PROVIDE** the password (Calvert Cliffs).
- E. **INDICATE** if this contact is: a drill not a drill.
- F. **PROVIDE** the 2-digit event code: ().
- G. **PROVIDE** the 6-digit pager message: (111 () () ()).
 A B C

STEP 4: VALIDATE THE INFORMATION

- A. **ASK** the CAN Operator to repeat if the event is: a drill not a drill.
- B. **ASK** the CAN Operator to repeat back the 2-digit event code: ().
- C. **ASK** the CAN Operator to repeat back the 6-digit pager message: (111 () () ()).
 A B C
- D. **WHEN** prompted, **THEN PROVIDE** the phone number you are calling from:

DRAFT SECTION "A" OPERATING
SRO

Facility: CCNPP		Date of Examination: 03/01/2004	
Examination Level (circle one): RO / SRO Operating Test Number:			
Administrative Topic (see Note)		Describe activity to be performed	
A.1.a Conduct of Operations		A.1.12 4.0 Ability to apply technical specifications to a system Review /Approve an IR for Operability determination <i>IR 2004</i>	
A.1.b Conduct of Operations		2.1.25 3.1 Ability to obtain and interpret station reference materials such as graphs, monographs, and tables which contain performance data Verify an ECC <i>ECC</i>	
A.2 Equipment Control		2.2.13 3.8 Knowledge of tagging and clearance procedures Approve a clearance or restoration per NO-1-112 <i>SRO TAGGING (2004)</i>	
A.3 Radiation Control		2.3.6 3.1 Knowledge of the requirements for reviewing and approving release permits Review an RCWMT discharge permit <i>CP-601 (NEW)</i>	
A.4 Emergency Plan		2.4.44 4.0 Knowledge of emergency plan protective action recommendations Classify an EAL and provide protective action recommendations per the ERPIP <i>ERPIP-3-4 mod</i>	
NOTE: All items (5 total) are required for SROs. RO applicants require only 4 items unless they are retaking only the administrative topics, when 5 are required.			

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE IR2004**

TASK: 204.006 Take Actions upon Identification of an Operability Issue

PURPOSE: Evaluates an SRO's ability review an STP with an equipment Operability Issue

**JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING**

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE IR2004

ELEMENT STANDARD
 (* = CRITICAL STEP)

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:

20 MINUTES

ACTUAL TIME
TO COMPLETE JPM:

_____ MINUTES

TIME CRITICAL TASK:

NO

TASK LEVEL:

TRAIN

TOOLS AND EQUIPMENT:

None

REFERENCE PROCEDURE(S):

STP-O-65L-1
 EN-4-102
 T.S. 3.6.6

TASK STANDARDS:

This JPM is complete when the SRO has determined that 1-SI-4150 is operable, a retest is required within 4 hours, and an evaluation must be performed within 96 hours.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE IR2004**

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

START _____

CUE: Provide the candidate the completed copy of STP-O-65L-1.
--

_____ Locates step 6.1.J. of STP-O-65L-1	Same as element.
--	------------------

* _____ J. Reviews step F	Determines valve stroked in the ALERT range.
---------------------------	--

CUE: When asked, provide a copy of EN-4-102. State "The Shift Manager directs you to section 5.7.2.3."

* _____ J. IF the Initial Test results from 6.1.F are in the Alert Range, THEN INITIATE the actions required by EN-4-102, including: (N/A IF NOT in Alert OR this test is an Immediate Retest)	Determines a retest is required within 4 hours and references EN-4-102.
--	--

- | | |
|---|---|
| <ul style="list-style-type: none"> • Performing an Immediate Retest of this valve within (4) hours AND entering Potential LCO/Alert Status in the CRO Log to track 96 hour resolution requirement. <p>OR</p> <ul style="list-style-type: none"> • Declaring the valve INOPERABLE | Determines that an evaluation for operability is required within 96 hours of the initial test. |
|---|---|

_____ Locates EN-4-102 section 5.7.2.3	Same as element.
--	------------------

- | | |
|---|---|
| _____ A. Perform actions specified in section 5.7.2.2 under either of the following circumstances: | Determines this step is not applicable. |
| <ol style="list-style-type: none"> 1. There is any reason to doubt the valve's ability to perform its safety functions, or 2. An immediate retest can not or will not be completed within a maximum of 4 hours following an initial test. | |

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE IR2004

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

CUE: No errors or plant conditions caused the results.

___ B.	Evaluate the test for any obvious human errors or unacceptable changing plant conditions that might invalidate the test or explain the test result.	Determines test results are accurate.
--------	---	---------------------------------------

CUE: The CRO will write the Issue Report.
--

* ___ C.	Start generating an Issue Report to place the valve in an Alert status.	Requests CRO write an Issue Report.
----------	---	-------------------------------------

CUE: The System Manager has new data that will lower the STNB minimum. He requests that the retest data be sent to him as soon after the test as possible.

* ___ D.	Notify the System Manager and/or IST Engineer in a timely manner, commensurate with the situation.	Attempts to notify System Engineer or IST Engineer (could normally be via OWC or SM).
----------	--	---

NOTE TO EVALUATOR: Ensure understanding of requirement for the Operability Evaluation within 96 hours before considering step J and this JPM satisfactory. This may involve reviewing section 5.7.4 of EN-4-102

TERMINATING CUE:	This JPM is complete when System Manager has been notified to supply documentation for the Operability Evaluation within 96 hours, no further action is required..
-------------------------	--

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE IR2004

TASK: 204.006 Take Actions upon Identification of an Operability Issue

Document below any instances of failure to 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.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

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

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 Shift Manager, CRO and any other plant staff.
 - 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 is at 100% power. STP-O-65L-1 (11/12 CNTMT SPRAY HDR VALVE QUARTERLY OPERABILITY TEST) is being performed as a scheduled surveillance requirement.
 - b. You are the CRS.
 - c. The CRO has informed you that 1-SI-4150-CV opened in less than it's Stroke Time Normal Band Minimum.
3. Initiating Cue: The CRO has requested you review the STP results per step 6.1. J for operability and required actions. Are there any questions? You may begin.

**CALVERT CLIFFS NUCLEAR POWER PLANT
SURVEILLANCE TEST PROCEDURE
UNIT ONE**

STP O-65L-1

11/12 CNTMT SPRAY HDR VALVE QUARTERLY OPERABILITY TEST

REVISION 3

SAFETY RELATED

CONTINUOUS USE

Approval Authority: Paul W. _____ 12/18/98
Signature/Date

Effective Date: 12/18/98

SURVEILLANCE TEST PROCEDURES ADDITIONAL COVER SHEET INFORMATION

A. Test Performance

Permission to perform test:

Mike Dase
Shift Manager

13/1/04
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

<u>TITLE</u>	<u>PAGE</u>
1.0 PURPOSE	5
2.0 APPLICABILITY/SCOPE	5
3.0 REFERENCES AND DEFINITIONS	7
3.1 REFERENCES	7
3.2 DEFINITIONS	8
4.0 PREREQUISITES	8
5.0 PRECAUTIONS	10
6.0 PERFORMANCE	11
6.1 11 CS HDR ISOL, 1-SI-4150-CV TEST	11
6.2 12 CS HDR ISOL, 1-SI-4151-CV TEST	14
7.0 POST PERFORMANCE ACTIVITIES	17
8.0 BASES	17
9.0 RECORDS	17
ATTACHMENT 1 POSITION INDICATION TEST RESULTS	18
ATTACHMENT 2 LOCKED VALVE VERIFICATION	19

LIST OF EFFECTIVE PAGES

<u>PAGE NUMBERS</u>	<u>REVISION</u>
1-19	03

PROCEDURE ALTERATIONS

<u>REVISION/CHANGE</u>	<u>PAGES</u>
03/00	ALL
03/01	5, 10
03/02	11
03/03	14

1.0 **PURPOSE**

- A. This test verifies the operability of 11 and 12 Containment Spray Header Isolation power operated valves.

2.0 **APPLICABILITY/SCOPE**

- A. Completion of this STP satisfies in part the requirements of the inservice testing program T.S. 5.5.8 for Section XI, Article IWW-3000 of the ASME Boiler and Pressure Vessel Code for 11 and 12 Containment Spray Header Isolation power operated valves.
- B. Each of the test sections renders a Containment Spray system train inoperable for the duration of the test to prevent an inadvertent SIAS from spraying down the containment building.
- C. The normal valve exercise and stroke time accomplishes a Fail Safe Test.
- D. Stroke times are recorded for control valves in their non-safety directions to provide a database to assist in evaluating valve performance during troubleshooting or following maintenance (e.g. PMT). The purpose of collecting this data is not associated with a valve's ability to perform its safety function, although this data may provide a precursor indication of valve degradation.
- E. Test Requirements:
1. This test shall be performed by individuals qualified on the watch stations for the affected equipment.
 2. The Shift Supervisor (Manager) shall determine if a pretest briefing is required and direct the SRO accordingly.
 3. The sections of this surveillance may be performed in any order, but the steps within each section shall be performed in the order written, in a step-by-step manner, unless specifically called out in this surveillance. Each step shall be initialed immediately after it is completed and prior to performing the next step. Each completed step shall be initialed by either the operator performing the step or the licensed operator directing the surveillance.
 4. Valve cycling prior to testing solely to achieve an acceptable test result is not permitted.
 5. Valve stroke time shall be measured from the moment of handswitch actuation to full-stroke indication.
 6. Position Indication Test (PIT) verifies that the remote position indication agrees with the locally observed valve operation. The results are recorded on the Position Indication Test Results attachment.
 7. Locked Valves shall be verified PER NO-1-205.

03/01

2.0.E **APPLICABILITY/SCOPE** (Continued)

8. Test results (Initial Test or Immediate Retest) which exceed the Limiting Value of Full Stroke Time (LVFST) indicate the valve's condition has changed significantly. Per EN-4-102, the valve shall be immediately declared inoperable and any applicable Technical Specification LCO Action Statement entered.
 9. Test results which fall in the Alert Range require an immediate retest be performed within 4 (four) hours of the initial test or the valve be declared inoperable. Additional actions required are outlined in EN-4-102.
 10. This test may be performed in any mode.
- F. Scope of Technical Specifications Versus the IST Program: Technical Specifications provide assurance important plant systems are capable of performing their safety functions during selected plant accidents. The IST Program is intended to detect significant changes in component performance before there is a substantial potential the component will not perform its safety function. Because the test is intended to confirm the operability of the component and not the system, the acceptance criteria (particularly the LVFST) is based on system operability requirements and the valve's normal performance.
- G. Evaluation of Test Quality/Validity: Test results should be evaluated to ensure there were no obvious human errors, test equipment problems, off-normal or changing system or environmental conditions, and procedural variations which may affect the test results.
-

2.0 APPLICABILITY/SCOPE (Continued)

H. **INDICATE** the reason for performing this STP: (check one)

- Scheduled Surveillance
- Immediate Retest: (Note steps to be performed in Pre-surveillance Remarks)
- Supplemental Testing
- Post-Maintenance Test or Operability Verification: (Note purpose and list steps in Pre-surveillance Remarks)
MO/IR numbers: _____

Brief Description: _____

Pre-surveillance/Immediate Retest Remarks:

Determination made by: *Mike Waser* (SRO)

3.0 REFERENCES AND DEFINITIONS

3.1 REFERENCES

A P&ID

1. OM-74, Safety Injection and Containment Spray Systems

B PROCEDURES

1. OI-3A, Safety Injection and Containment Spray Unit 1.
2. EN-4-102, ASME Pump and Valve Testing.
3. EN-4-104, Surveillance Test Program.
4. NO-1-205, Locked Valves.
5. STP O-68-1, Refueling Cycle Valve Position Indicator Test.

3.1 REFERENCES (Continued)

C CODES AND STANDARDS

1. NRC Generic Letter No. 89-04, Inservice Testing for Pumps and Valves.
2. CCNPP Pump and Valve Test Program, Units 1 and 2.
3. ASME BPV Code, Section XI, "Rules for Inservice Inspection of Nuclear Power Plant Components".
4. Technical Specifications.

3.2 DEFINITIONS

Stroke Time Normal Band (STNB): Test results which fall in the STNB (Normal Range) indicate the condition of the valve and its components/support systems has not changed or degraded significantly since the Reference Value was established. Therefore, the long-term capability of the valve to perform its safety function(s) is reasonably assured.

ALERT Range: Test results which fall in the Alert Range indicate the condition of the valve or its components/support systems may have changed or degraded significantly. The test results may also be due to factors unrelated to the valve's condition. Either way, the Immediate Retest is intended to establish confidence in the short-term (up to 96 hours) capability of the valve to perform its safety function(s).

Limiting Value of Full Stroke Time (LVFST): Test results which exceed the LVFST indicate the valve or its components/support systems has changed or degraded significantly enough to immediately lose confidence in the valve to perform its safety function(s). The valve or its components/support systems shall be declared out of service.

4.0 PREREQUISITES

- A. A pretest briefing has been held. (N/A if shift Supervisor (Manager) determined briefing **NOT** required)
- B. **VERIFY** qualifications of test personnel.

INITIALS

N/A
SRO
W. W.
SRO

4.0 **PREREQUISITES (Continued)**

INITIALS

C. **DETERMINE** Position Indication Testing (PIT) requirements as follows: (check one)

SR0

PIT not required.

Complete ATTACHMENT 1, POSITION INDICATION TEST RESULTS, during valve stroke testing, when directed by STP O-68-1.

Complete ATTACHMENT 1, POSITION INDICATION TEST RESULTS, for Post-Maintenance testing specified in Section 2.0.

D. **ENSURE** personnel available to be stationed locally to observe valve operation for valve(s) requiring PIT testing **AND RECORD** PIT results on ATTACHMENT 1, POSITION INDICATION TEST RESULTS concurrently with the performance of this test. (N/A if PIT testing **NOT** required)

SR0

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

SR0

F. Calibrated stopwatch available for valve timing.

SR0

5.0 PRECAUTIONS

- A. **STOP** the test, **STABILIZE** the plant **AND NOTIFY** the Shift Supervisor (Manager) for any of the following:
- Equipment malfunctions
 - Out of tolerance items
 - Conditions outside those allowed by Technical Specifications
 - Unexpected plant responses
- B. Two independent Containment Spray Systems shall be operable in Modes 1-3, greater than or equal to 1750 PSIA. (T.S. 3.6.6)
- C. With any Containment Air Coolers inoperable refer to action of T.S. 3.6.6.

| 03/01

| 03/01

6.0 PERFORMANCE

INITIALS

6.1 11 CS HDR ISOL, 1-SI-4150-CV TEST

Date: 3/1/04 Time: 0800

A. **RECORD** the following stopwatch information:

1. Serial number: 20Y01530

CRD

2. Calibration due date: 4/20/04

CRD

B. **CHECK** 12 Containment Spray header operable.
(N/A if RCS pressure is less than 1750 PSIA)

CRD

C. **VERIFY SHUT** 11 CS HDR isolation, 1-SI-4150-CV.

CRD

CAUTION
The next step renders 11 Containment Spray header inoperable.

D. **PLACE** 11 CS PP handswitch 1-HS-4146 in PULL TO LOCK.

CRD

E. **VERIFY SHUT** Containment Spray Pump Disch isolation,
1-SI-314.

CRD

F. **OPEN** 1-SI-4150-CV **AND RECORD** the stroke time below:

Stroke Time:	<u>19.6</u> secs	(Circle One)
LVFST	>39.9 secs	(Inoperable)
STNB(Max)	>33.2 secs	(Alert Range)
Reference Value	<u>26.6</u> secs	(STNB)
STNB(Min)	<20.0 secs	(Alert Range)

6.1 11 CS HDR ISOL, 1-SI-4150-CV TEST (Continued)

INITIALS

G. **SHUT** 11 CS HDR isolation, 1-SI-4150-CV **AND RECORD** stroke time.

CAO

4.8 secs

H. **LOCK OPEN** Containment Spray Pump Disch isolation, 1-SI-314. (N/A if on Shutdown Cooling)

CAO

I. **RETURN** 11 CS PP handswitch 1-HS-4146 to AUTO. (N/A if on Shutdown Cooling)

CAO

J. **IF** the Initial Test results from 6.1.F are in the Alert Range, **THEN INITIATE** the actions required by EN-4-102, including: (N/A **IF NOT** in Alert **OR** this test is an Immediate Retest)

SRO

- Performing an Immediate Retest of this valve within four (4) hours **AND** entering Potential LCO/Alert Status in the CRO Log to track 96 hour resolution requirement.

OR

- Declaring the valve INOPERABLE.

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 below signifies that the noted step has been completed and signed off by a qualified operator **other than the SRO reviewer** and that the actual equipment response is acceptable and valid.

K. ACCEPTANCE CRITERIA

1. Did 1-SI-4150-CV open in less than or equal to LVFST seconds in Step 6.1.F?

YES / NO
(circle one)

SRO

NOTE

For an Initial Test with test results within the STNB, reference to EN-4-102 is not required and the answer to the following question is YES.

2. Is 1-SI-4150-CV OPERABLE per EN-4-102?

YES / NO
(circle one)

SRO

6.1.K 11 CS HDR ISOL_1-SI-4150-CV TEST (Continued)

INITIALS

3. Did 1-SI-4150-CV Control Room position indication agree with local valve position in ATTACHMENT 1? (Circle N/A if PIT not required)

YES / NO / N/A
(circle one)

SRO

4. This test section is considered satisfactory if YES or N/A was answered in all steps above.

SAT / UNSAT
(circle one)

SRO

- a. **IF** unsat,
THEN notify the SS (SM), declare the affected equipment inoperable and take actions as required by Technical Specifications and administrative actions stated in EN-4-104.
- b. **INITIATE** an Issue Report for any equipment deficiencies.

6.2 12 CS HDR ISOL, 1-SI-4151-CV TEST

INITIALS

A. **RECORD** the following stopwatch information:

1. Serial number: _____

2. Calibration due date: _____

B. **CHECK** 11 Containment Spray header operable.
(N/A if RCS pressure is less than 1750 PSIA)

C. **VERIFY SHUT** 12 CS HDR isolation, 1-SI-4151-CV.

CAUTION
The next step renders 12 Containment Spray header inoperable.

D. **PLACE** 12 CS PP handswitch 1-HS-4147 in PULL TO LOCK.

E. **VERIFY SHUT** Containment Spray Pump Disch isolation,
1-SI-324.

F. **OPEN** 1-SI-4151-CV **AND RECORD** the stroke time below:

Stroke Time:	_____ secs	(Circle One)
LVFST	>42.3 secs	(Inoperable)
STNB(Max)	>35.2 secs	
Reference Value	<u>28.2 secs</u>	(STNB)
STNB(Min)	<21.2 secs	(Alert Range)

03/03

G. **SHUT** 12 CS HDR isolation, 1-SI-4151-CV **AND RECORD** stroke time.

_____ secs

H. **LOCK OPEN** Containment Spray Pump Disch isolation,
1-SI-324. (N/A if on Shutdown Cooling)

6.2 12 CS HDR ISOL, 1-SI-4151-CV TEST (Continued)

INITIALS

- I. RETURN 12 CS PP handswitch 1-HS-4147 to AUTO.
(N/A if on Shutdown Cooling)

NOTE

This step is included in this section to maintain format. The current reference value does not allow an Alert Range for the valve tested in this section.

- J. **IF** the initial Test results from 6.2.F are in the Alert Range,
THEN INITIATE the actions required by EN-4-102, including:
(N/A **IF NOT** in Alert **OR** this test is an Immediate Retest)

SRO

- Performing an Immediate Retest of this valve within four (4) hours **AND** entering Potential LCO/Alert Status in the CRO Log to track 96 hour resolution requirement.

OR

- Declaring the valve INOPERABLE.

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 below signifies that the noted step has been completed and signed off by a qualified operator **other than the SRO reviewer** and that the actual equipment response is acceptable and valid.

K. ACCEPTANCE CRITERIA

1. Did 1-SI-4151-CV open in less than or equal to LVFST seconds in Step 6.2.F?

YES / NO
(circle one)

SRO

NOTE

For an Initial Test with test results within the STNB, reference to EN-4-102 is not required and the answer to the following question is YES.

2. Is 1-SI-4151-CV OPERABLE per EN-4-102?

YES / NO
(circle one)

SRO

11/12 CNTMT SPRAY HDR VALVE QUARTERLY
OPERABILITY TEST

STP O-65L-1
Rev. 3/Unit 1
Page 16 of 19

6.2.K 12 CS HDR ISOL, 1-SI-4151-CV TEST (Continued)

INITIALS

3. Did 1-SI-4151-CV Control Room position indication agree with local valve position in ATTACHMENT 1? (Circle N/A if PIT not required)

YES / NO / N/A
(circle one)

SRO

4. This test section is considered satisfactory if YES or N/A was answered in all steps above.

SAT / UNSAT
(circle one)

SRO

- a. **IF** unsat,
THEN notify the SS (SM), declare the affected equipment inoperable and take actions as required by Technical Specifications and administrative actions stated in EN-4-104.
- b. **INITIATE** an Issue Report for any equipment deficiencies.

7.0 POST PERFORMANCE ACTIVITIES

INITIALS

- A. **ENSURE ATTACHMENT 2, LOCKED VALVE VERIFICATION,**
is completed by an independent verifier for all locked valves
manipulated in this procedure.

- B. **PERFORM** a post test page verification of this surveillance.

8.0 BASES

NONE

9.0 RECORDS

- A. Records generated by this procedure shall be captured and controlled. Prior to
transferring records to Records Management 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

Page 1 of 1

POSITION INDICATION TEST RESULTS

COMPONENT	POSITION VERIFICATION		INITIALS
	OPEN (circle one)	CLOSE (circle one)	
1-SI-4150-CV	SAT/UNSAT	SAT/UNSAT	
1-SI-4151-CV	SAT/UNSAT	SAT/UNSAT	

ATTACHMENT 2

Page 1 of 1

LOCKED VALVE VERIFICATION

1. **PERFORM** an independent verification of the following valves:
(N/A valves **NOT** manipulated in procedure or valves placed in Locked Valve Deviation Log per NO-1-205).

VALVE NUMBER	DESCRIPTION	REQUIRED POSITION	INITIALS
1-SI-314	11 CS PP DISCH	LOCKED OPEN	
1-SI-324	12 CS PP DISCH	LOCKED OPEN	
1-SI-4150-CV	11 CS HDR ISOL CV	SHUT	
1-SI-4151-CV	12 CS HDR ISOL CV	SHUT	

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ECC**

SYSTEM: Nuclear Engineering Operating Procedures
TASK: 203.003 Direct the Reactor Operator in taking the Reactor Critical
PURPOSE: Evaluates an Operator's Ability to Verify an ECC per NEOP 302

**JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING**

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ECC**

ELEMENT STANDARD
(* = CRITICAL STEP)

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:

15 MINUTES

ACTUAL TIME TO COMPLETE JPM:

_____ MINUTES

TIME CRITICAL TASK:

NO

TASK LEVEL:

LEVEL 1

TOOLS AND EQUIPMENT:

Copy of NEOP-302 Attachment 4

REFERENCE PROCEDURE(S):

NEOP-302
NEOP-23

TASK STANDARDS:

This JPM is complete when the ECC has been reviewed and found unacceptable.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ECC**

ELEMENT	STANDARD
(* = CRITICAL STEP)	

TIME START _____	
_____ Identify and locate NEOP-302, section 6.3 step T.	Same as element.
6.3 Single Point ECC Calculation	

CUE: Provide a completed copy of NEOP-302 Attachment 4.

T. The Shift SRO shall perform the following:

CUE: Previous critical conditions are correct.

___ 1. Verify that the previous critical condition is correct.

CUE: Criticality is expected within 2 hours of the ECC.

___ 2. **Verify** that criticality is expected within the appropriate time frame (2 or 4 hours) of the ECC.

Checks Precautions and determines that the ECC is good for 2 hours.

(This requirement is in Precautions, 5.5 and 5.6)

(NOTE TO EVALUATOR, THIS TYPO, TWO 2'S EXISTS IN THE NEOP)

Checks the ECC time and date are within 2 hours of estimated criticality

___ 2. **Verify** that the ECC date and time are within the allowable range.

* ___ 3. **INDEPENDANTLY VERIFY** that the ECC is calculated correctly

Returns to step A of 6.3 and verifies all data is calculated and entered correctly. (There are no mistakes on this part of the ECC)

* ___ 4. **VERIFY** that the ECC Upper and lower CEA bounds are calculated correctly and are

Identifies mistake calculating ECC upper and lower CEA bounds

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ECC

ELEMENT

STANDARD

(* = CRITICAL STEP)

5	IF an error is found, THEN INSTRUCT the preparer to make the necessary corrections and REPEAT the review
---	--

TIME STOP _____

TERMINATING CUE:	This JPM is complete when the upper and lower CEA bounds are found to be incorrect. No further actions are required.
-------------------------	--

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ECC**

TASK: 203.003 Direct the Reactor Operator in taking the Reactor Critical

Document below any instances of failure to 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.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

COMMENTS:

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

SATISFACTORY

UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____

DATE: _____

ATTACHMENT 4
ECC — 1-HOUR WINDOW

Previous Critical Conditions

Unit (6.3.A.1)	Cycle (6.3.A.1)	Date (6.3.A.2)	Time (6.3.A.2)	Burnup, MWD/MTU (6.3.A.3)
2	15	3/1/04	1020	9500

Current Conditions

Excess Reactivity, % $\Delta\rho$ (6.3.B.1) [A]	HZP IBW, ppm / % $\Delta\rho$ (6.3.B.2) [B]	B-10 Correction (6.3.B.3) [C]
11.713	122.41	.945

Excess Reactivity Source (6.3.B.1): NEOP-23 Fig 2-11.A.7
 IBW Source (6.3.B.2): NEOP-23 Figure 2-11.A.2
 B-10 Source (6.3.B.3): B-10 Spreadsheet

Estimated Critical Conditions

Date (6.3.C)	Time (6.3.C)	Hours After Shutdown (6.3.D)	Xenon Worth, % $\Delta\rho$ (6.3.E) [D]	Group 3, inches (6.3.H)	Group 4, inches (6.3.H)	Group 5, inches (6.3.H)
3/1/04	1020	72	.075	135	60	0

CEA Worth, % $\Delta\rho$ (6.3.I) [E]	Corrected HZP IBW, ppm/% $\Delta\rho$ (6.3.J) [F] = B/C	Boron Worth, % $\Delta\rho$ (6.3.K) [G] = A-(E+D)	Critical Boron Conc., ppm (6.3.L) [H] = F*G
.745	129.53	10.893	1410.97

CEA Worth Source (6.3.I): NEOP-23 Fig 2-11.B.1

ECC Tolerance Band

Lower CEA Bound (ECC Worth + 0.5 % $\Delta\rho$)			
Bounding Worth (6.3.M)	Group 3, inches (6.3.N)	Group 4, inches (6.3.N)	Group 5, inches (6.3.N)
1.245	123.00	33.00	0

96.00 6.00

Upper CEA Bound (ECC Worth - 0.5 % $\Delta\rho$)			
Bounding Worth (6.3.P)	Group 3, inches (6.3.Q)	Group 4, inches (6.3.Q)	Group 5, inches (6.3.Q)
.245	135	135	97.5

132.00 42.00

Prepared by: R.J. Anagnostis / 1/3/04
signature date

SRO Verification by: _____ / _____
signature date

Used incorrect figure,
16,500 mwd/mtu to EOC
instead of
4000 to 10000 mwd/mtu
figure.

NOTE: Obtain a sequence number from the Attachment Log Sheet, Attachment 1.

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE

TASK: 203.003 Direct the Reactor Operator in taking the Reactor Critical

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:** Violations of safety procedures will result in failure of the JPM.
2. Initial Conditions:
 - a. Unit-2 had been at 100% power for several months when a trip occurred
 - b. NFM has completed an ECC for the reactor startup.
 - c. T_{AVE} is 532 °F
 - d. Core Burnup is 9,500 MWD/MTU on cycle 15.
 - e. Estimated time of criticality is 72 hours after the trip.
 - e You are performing the duties of the Unit-2 CRS.
3. Initiating Cue:. The Shift Manager has directed you to perform the SRO review of the ECC per NEOP 302 section 6.3 step T. Are there any questions? You may begin.

ATTACHMENT 4
ECC —1-HOUR WINDOW

Previous Critical Conditions

Unit (6.3.A.1)	Cycle (6.3.A.1)	Date (6.3.A.2)	Time (6.3.A.2)	Burnup, MWD/MTU (6.3.A.3)
2	15	3/1/04	1020	9500

Current Conditions

Excess Reactivity, %Δp (6.3.B.1) [A]	HZP IBW, ppm / %Δp (6.3.B.2) [B]	B-10 Correction (6.3.B.3) [C]
11.713	122.41	.945

Excess Reactivity Source (6.3.B.1): NEOP-23 Fig 2-11.A.1
 IBW Source (6.3.B.2): NEOP-23 Figure 2-11.A.2
 B-10 Source (6.3.B.3): B-10 Spreadsheet

Estimated Critical Conditions

Date (6.3.C)	Time (6.3.C)	Hours After Shutdown (6.3.D)	Xenon Worth, %Δp (6.3.E) [D]	Group 3, inches (6.3.H)	Group 4, inches (6.3.H)	Group 5, inches (6.3.H)
3/4/04	1020	72	.075	135	60	0

CEA Worth, %Δp (6.3.I) [E]	Corrected HZP IBW, ppm/%Δp (6.3.J) [F] = B/C	Boron Worth, %Δp (6.3.K) [G] = A-(E+D)	Critical Boron Conc., ppm (6.3.L) [H] = F*G
.745	129.53	10.893	1410.97

CEA Worth Source (6.3.I): NEOP-23 Fig 2-11.B.1

ECC Tolerance Band

Lower CEA Bound (ECC Worth + 0.5 %Δp)			
Bounding Worth (6.3.M)	Group 3, inches (6.3.N)	Group 4, inches (6.3.N)	Group 5, inches (6.3.N)
1.245	123.00	33.0	0

Upper CEA Bound (ECC Worth - 0.5 %Δp)			
Bounding Worth (6.3.P)	Group 3, inches (6.3.Q)	Group 4, inches (6.3.Q)	Group 5, inches (6.3.Q)
.245	135	135	97.5

Prepared by: R. J. Omeringer / 3/3/04
signature date

SRO Verification by: _____ / _____
signature date

NOTE: Obtain a sequence number from the Attachment Log Sheet, Attachment 1.

6.3 SINGLE POINT ECC CALCULATION FOR NORMAL PLANT STARTUP

This section may be performed to prepare an ECC for a Normal Plant Startup (see Definition 3.3.E) for which only a single time point is desired. Performance of Section 6.3 is at the discretion and preference of the NFM-SE.

- A. **COMPLETE** the previous critical conditions section of Attachment 4.
1. **RECORD** the unit and cycle numbers.
 2. **RECORD** the date and time the unit shut down.
 3. **RECORD** the current burnup for the cycle from the plant computer point "CEBURNUP".
- B. **COMPLETE** the current conditions section of Attachment 4.
1. **RECORD** the excess reactivity from Figure 1-II.A.7 of NEOP-13 (Figure 2-II.A.7 of NEOP-23) OR an approved calculation on Attachment 4 and **RECORD** the source on Attachment 4.
 2. **DETERMINE** the HZP Inverse Boron Worth (IBW) from one of the following sources and **RECORD** the value and the source on Attachment 4:
 - Figure 1-II.A.2 of NEOP-13 (Figure 2-II.A.2 of NEOP-23)
 - An approved calculation
 3. **DETERMINE** the B-10 Correction Factor from one of the following sources and **RECORD** the value and the source on Attachment 4:
 - The Reactor Engineering boron-10 depletion tracking spreadsheet
 - Results from a B-10 sample
 - An approved calculation or other documented source
- C. **RECORD** the estimated date and time of reactor criticality for the ECC on Attachment 4.
- D. **RECORD** the elapsed time from reactor shutdown to the estimated time of criticality as "Hours After Shutdown" on Attachment 4. If the elapsed time is greater than 84 hours, "> 84" hours may be recorded.
- E. **DETERMINE** the post shutdown xenon worth.
1. **IF** the elapsed time is less than or equal to 84 hours, **THEN DETERMINE** the post shutdown xenon worth at the estimated time of criticality using the XENON RHO CALCULATOR Report and **RECORD** on Attachment 4.
 2. **IF** the elapsed time is greater than 84 hours, **THEN RECORD** the post shutdown xenon worth as zero (0) on Attachment 4.
- F. **VERIFY** that the XENON RHO CALCULATOR Report and the B-10 Spreadsheet Output, if used, have been independently reviewed and signed by a Reactor Engineer. [B-89]
- G. **PLACE** hard copies of the XENON RHO CALCULATOR Report and B-10 Spreadsheet Output, if used, with Attachment 4.

6.3 SINGLE POINT ECC CALCULATION (Continued)

- H. DETERMINE the desired CEA position for criticality using the following criteria and RECORD the CEA position on Attachment 4:
1. IF the estimated time of criticality is more than 24 hours after the shutdown AND burnup is less than 12,000 MWD/MTU, THEN USE a Group 4 position between 45 and 90 inches withdrawn.
 2. OTHERWISE, USE a Group 4 position of 90 inches withdrawn.

- I. DETERMINE the CEA reactivity worth at the desired CEA position using Figure 1-II.B.1 of NEOP-13 (Figure 2-II.B.1 of NEOP-23) for the current burnup OR an approved calculation, and RECORD the CEA worth and source on Attachment 4.

- J. CALCULATE and RECORD on Attachment 4 the Corrected HZP IBW using the formula:

$$\text{Corrected HZP IBW} = \frac{\text{HZP IBW}}{B - 10 \text{ Correction Factor}}$$

- K. CALCULATE the Boron Worth by using the formula below and RECORD on Attachment 4.

$$\text{Boron Worth} = \text{Excess Reactivity} - (\text{CEA Worth} + \text{Xenon Worth})$$

- L. MULTIPLY the Boron Worth by the Corrected HZP IBW, and RECORD on Attachment 4. This is the Estimated Critical Boron Concentration.
- M. ADD the ECC Tolerance ($0.5 \% \Delta \rho$) to the estimated CEA Worth from step 6.3.I and RECORD as Lower CEA Bound - Bounding Worth on Attachment 4. This result will be used to determine the ECC Lower CEA Bound.
- N. DETERMINE the ECC Lower CEA Bound by finding the discrete CEA position at or just above that associated with the reactivity worth found in step 6.3.M using Figure 1-II.B.1 of NEOP-13 (Figure 2-II.B.1 of NEOP-23) for the current burnup OR an approved calculation, and RECORD on Attachment 4.
- O. IF the Lower CEA Bound is LESS than the Zero Power Dependent Insertion Limit, THEN PERFORM step 6.3 again with the CEA critical position further out of the core.
- P. SUBTRACT the ECC Tolerance ($0.5 \% \Delta \rho$) from the estimated CEA Worth from step 6.3.I and RECORD as Upper CEA Bound - Bounding Worth on Attachment 4. This result will be used to determine the ECC Upper CEA Bound.
- Q. DETERMINE the ECC Upper CEA Bound by finding the discrete CEA position at or just below that associated with the reactivity worth found in step 6.3.P using Figure 1-II.B.1 of NEOP-13 (Figure 2-II.B.1 of NEOP-23) for the current burnup OR an approved calculation, and RECORD on Attachment 4.

6.3 SINGLE POINT ECC CALCULATION (Continued)

- R. IF the Upper CEA Bound is **GREATER** than 135 inches withdrawn on Reg Group 5, **THEN PERFORM** step 6.3 again with the CEA critical position inserted further into the core.
- S. **SIGN** Attachment 4 and **SUBMIT** the ECC to a Shift SRO for independent verification. **[B-84]**
- T. The Shift SRO shall perform the following:
1. **VERIFY** that the previous critical condition is correct. **[B-8]**
 2. **VERIFY** that criticality is expected within the appropriate time frame (two or four hours) of the ECC time.
 2. **VERIFY** that the ECC date and time are within the allowable range.
 3. **INDEPENDENTLY VERIFY** that the ECC is calculated correctly. **[B-84]**
 4. **VERIFY** that the ECC Upper and Lower CEA Bounds are calculated correctly and are between 135 inches withdrawn on Reg Group 5 and the Zero Power PDIL.
 5. **IF** an error is found, **THEN INSTRUCT** the preparer to make the necessary corrections, and **REPEAT** the review.
 6. **IF** the calculation is acceptable, **THEN** the reviewing Shift SRO shall **SIGN** Attachment 4.
- U. **IF** the ECC is used as a basis for changing RCS boron or CEA withdrawal during the approach to criticality, **THEN ASSIGN** a sequence number to the Attachment 4 in accordance with Attachment 1. **[B-85]**

XENON WORTH CALCULATOR

Revision 3 Change 0

Unit 2 Cycle 15
 Burnup = 9,521 MWD/MTU

Trip from Equilibrium at 100.0% Power
 At 03/01/2004 10:20
 Calculation performed 12/16/2003 10:38

<u>Hours After Trip (Date/Time)</u>	<u>Xenon Worth</u>
0 (03/01/2004 10:20) -----	2.411 % $\Delta\rho$
1 (03/01/2004 11:20) -----	2.753 % $\Delta\rho$
2 (03/01/2004 12:20) -----	3.000 % $\Delta\rho$
3 (03/01/2004 13:20) -----	3.184 % $\Delta\rho$
4 (03/01/2004 14:20) -----	3.313 % $\Delta\rho$
5 (03/01/2004 15:20) -----	3.396 % $\Delta\rho$
6 (03/01/2004 16:20) -----	3.440 % $\Delta\rho$
7 (03/01/2004 17:20) -----	3.451 % $\Delta\rho$
8 (03/01/2004 18:20) -----	3.434 % $\Delta\rho$
9 (03/01/2004 19:20) -----	3.395 % $\Delta\rho$
10 (03/01/2004 20:20) -----	3.337 % $\Delta\rho$
11 (03/01/2004 21:20) -----	3.264 % $\Delta\rho$
12 (03/01/2004 22:20) -----	3.179 % $\Delta\rho$
13 (03/01/2004 23:20) -----	3.084 % $\Delta\rho$
14 (03/02/2004 00:20) -----	2.983 % $\Delta\rho$
15 (03/02/2004 01:20) -----	2.876 % $\Delta\rho$
16 (03/02/2004 02:20) -----	2.765 % $\Delta\rho$
17 (03/02/2004 03:20) -----	2.653 % $\Delta\rho$
18 (03/02/2004 04:20) -----	2.540 % $\Delta\rho$
19 (03/02/2004 05:20) -----	2.426 % $\Delta\rho$
20 (03/02/2004 06:20) -----	2.314 % $\Delta\rho$

Training Use Only

XENON WORTH CALCULATOR

Revision 3 Change 0

<u>Hours After Trip (Date/Time)</u>	<u>Xenon Worth</u>
21 (03/02/2004 07:20) -----	2.203 % $\Delta\rho$
22 (03/02/2004 08:20) -----	2.094 % $\Delta\rho$
23 (03/02/2004 09:20) -----	1.988 % $\Delta\rho$
24 (03/02/2004 10:20) -----	1.885 % $\Delta\rho$
25 (03/02/2004 11:20) -----	1.785 % $\Delta\rho$
26 (03/02/2004 12:20) -----	1.689 % $\Delta\rho$
27 (03/02/2004 13:20) -----	1.596 % $\Delta\rho$
28 (03/02/2004 14:20) -----	1.507 % $\Delta\rho$
29 (03/02/2004 15:20) -----	1.421 % $\Delta\rho$
30 (03/02/2004 16:20) -----	1.339 % $\Delta\rho$
31 (03/02/2004 17:20) -----	1.261 % $\Delta\rho$
32 (03/02/2004 18:20) -----	1.187 % $\Delta\rho$
33 (03/02/2004 19:20) -----	1.116 % $\Delta\rho$
34 (03/02/2004 20:20) -----	1.049 % $\Delta\rho$
35 (03/02/2004 21:20) -----	0.985 % $\Delta\rho$
36 (03/02/2004 22:20) -----	0.924 % $\Delta\rho$
37 (03/02/2004 23:20) -----	0.867 % $\Delta\rho$
38 (03/03/2004 00:20) -----	0.813 % $\Delta\rho$
39 (03/03/2004 01:20) -----	0.762 % $\Delta\rho$
40 (03/03/2004 02:20) -----	0.714 % $\Delta\rho$
41 (03/03/2004 03:20) -----	0.668 % $\Delta\rho$
42 (03/03/2004 04:20) -----	0.625 % $\Delta\rho$
43 (03/03/2004 05:20) -----	0.585 % $\Delta\rho$
44 (03/03/2004 06:20) -----	0.547 % $\Delta\rho$

Training Use Only

XENON WORTH CALCULATOR

Revision 3 Change 0

<u>Hours After Trip (Date/Time)</u>	<u>Xenon Worth</u>
45 (03/03/2004 07:20) -----	0.511 % $\Delta\rho$
46 (03/03/2004 08:20) -----	0.478 % $\Delta\rho$
47 (03/03/2004 09:20) -----	0.446 % $\Delta\rho$
48 (03/03/2004 10:20) -----	0.417 % $\Delta\rho$
49 (03/03/2004 11:20) -----	0.389 % $\Delta\rho$
50 (03/03/2004 12:20) -----	0.363 % $\Delta\rho$
51 (03/03/2004 13:20) -----	0.339 % $\Delta\rho$
52 (03/03/2004 14:20) -----	0.316 % $\Delta\rho$
53 (03/03/2004 15:20) -----	0.295 % $\Delta\rho$
54 (03/03/2004 16:20) -----	0.275 % $\Delta\rho$
55 (03/03/2004 17:20) -----	0.256 % $\Delta\rho$
56 (03/03/2004 18:20) -----	0.239 % $\Delta\rho$
57 (03/03/2004 19:20) -----	0.222 % $\Delta\rho$
58 (03/03/2004 20:20) -----	0.207 % $\Delta\rho$
59 (03/03/2004 21:20) -----	0.193 % $\Delta\rho$
60 (03/03/2004 22:20) -----	0.180 % $\Delta\rho$
61 (03/03/2004 23:20) -----	0.167 % $\Delta\rho$
62 (03/04/2004 00:20) -----	0.156 % $\Delta\rho$
63 (03/04/2004 01:20) -----	0.145 % $\Delta\rho$
64 (03/04/2004 02:20) -----	0.135 % $\Delta\rho$
65 (03/04/2004 03:20) -----	0.125 % $\Delta\rho$
66 (03/04/2004 04:20) -----	0.117 % $\Delta\rho$
67 (03/04/2004 05:20) -----	0.108 % $\Delta\rho$
68 (03/04/2004 06:20) -----	0.101 % $\Delta\rho$

Training Use Only

XENON WORTH CALCULATOR

Revision 3 Change 0

<u>Hours After Trip (Date/Time)</u>	<u>Xenon Worth</u>
69 (03/04/2004 07:20) -----	0.094 % $\Delta\rho$
70 (03/04/2004 08:20) -----	0.087 % $\Delta\rho$
71 (03/04/2004 09:20) -----	0.081 % $\Delta\rho$
72 (03/04/2004 10:20) -----	0.075 % $\Delta\rho$
73 (03/04/2004 11:20) -----	0.070 % $\Delta\rho$
74 (03/04/2004 12:20) -----	0.065 % $\Delta\rho$
75 (03/04/2004 13:20) -----	0.060 % $\Delta\rho$
76 (03/04/2004 14:20) -----	0.056 % $\Delta\rho$
77 (03/04/2004 15:20) -----	0.052 % $\Delta\rho$
78 (03/04/2004 16:20) -----	0.048 % $\Delta\rho$
79 (03/04/2004 17:20) -----	0.045 % $\Delta\rho$
80 (03/04/2004 18:20) -----	0.042 % $\Delta\rho$
81 (03/04/2004 19:20) -----	0.039 % $\Delta\rho$
82 (03/04/2004 20:20) -----	0.036 % $\Delta\rho$
83 (03/04/2004 21:20) -----	0.033 % $\Delta\rho$
84 (03/04/2004 22:20) -----	0.031 % $\Delta\rho$

Training Use 13/1/04
Prepared by _____ Date

Not Real 13/1/04
Reviewed by _____ Date

Training Use Only

Nuclear Fuel Management B10 Spreadsheet Startup Report

Date of Calculation: 12/16/2003

Core Burnup (MWD/MTU): 9521.00

Maximum RCS Boron (PPM): 1200

Startup B10: 18.715

Startup B10 Correction Factor: 0.945

Originating Engineer: Training Only

Reviewer: Not used

FIGURE 2-II.B.1
HZP INTEGRAL CEA WORTH WITH OVERLAP
4,000 MWD/MTU TO 10,000 MWD/MTU
Regulating Bank Worth = 3.2729 %Δp
UNIT 2 CYCLE 15
 (Page 3 of 5)

Group 5 (inches W/D)	Group 4 (inches W/D)	Group 3 (inches W/D)	HZP Integral CEA Worth (%Δp)
58.50			0.208
57.75			0.209
57.00			0.210
56.25			0.210
55.50			0.211
54.75			0.211
54.00			0.212
53.25			0.212
52.50			0.212
51.75			0.212
51.00			0.212
50.25			0.212
49.50			0.213
48.75			0.214
48.00			0.215
47.25			0.217
46.50			0.219
45.75			0.222
45.00	135.00		0.226
44.25	134.25		0.230
43.50	133.50		0.235
42.75	132.75		0.240
42.00	132.00		0.245
41.25	131.25		0.250
40.50	130.50		0.256
39.75	129.75		0.262
39.00	129.00		0.269
38.25	128.25		0.275
37.50	127.50		0.282
36.75	126.75		0.288
36.00	126.00		0.295
35.25	125.25		0.302
34.50	124.50		0.308
33.75	123.75		0.315
33.00	123.00		0.322
32.25	122.25		0.329
31.50	121.50		0.336
30.75	120.75		0.343
30.00	120.00		0.350
29.25	119.25		0.356
28.50	118.50		0.363
27.75	117.75		0.370
27.00	117.00		0.377
26.25	116.25		0.383
25.50	115.50		0.390
24.75	114.75		0.397
24.00	114.00		0.403
23.25	113.25		0.410
22.50	112.50		0.416
21.75	111.75		0.423
21.00	111.00		0.429

Group 5 (inches W/D)	Group 4 (inches W/D)	Group 3 (inches W/D)	HZP Integral CEA Worth (%Δp)
20.25	110.25		0.435
19.50	109.50		0.441
18.75	108.75		0.448
18.00	108.00		0.454
17.25	107.25		0.460
16.50	106.50		0.466
15.75	105.75		0.472
15.00	105.00		0.478
14.25	104.25		0.484
13.50	103.50		0.490
12.75	102.75		0.496
12.00	102.00		0.501
11.25	101.25		0.507
10.50	100.50		0.512
9.75	99.75		0.518
9.00	99.00		0.523
8.25	98.25		0.528
7.50	97.50		0.533
6.75	96.75		0.538
6.00	96.00		0.543
5.25	95.25		0.548
4.50	94.50		0.553
3.75	93.75		0.558
3.00	93.00		0.563
2.25	92.25		0.567
1.50	91.50		0.572
0.75	90.75		0.576
0.00	90.00		0.581
	89.25		0.585
	88.50		0.590
	87.75		0.594
	87.00		0.598
	86.25		0.603
	85.50		0.607
	84.75		0.611
	84.00		0.615
	83.25		0.620
	82.50		0.624
	81.75		0.628
	81.00		0.632
	80.25		0.636
	79.50		0.640
	78.75		0.645
	78.00		0.649
	77.25		0.653
	76.50		0.657
	75.75		0.661
	75.00		0.665
	74.25		0.669
	73.50		0.673
	72.75		0.677

FIGURE 2-II.A.2
INVERSE BORON WORTH vs. BURNUP
NO BORON-10 DEPLETION CORRECTION APPLIED
UNIT 2 CYCLE 15
(Page 2 of 3)

Burnup (^{MWD} / _{MTU})	HZP Inverse Boron Worth (ppm/%Δρ)	HFP Inverse Boron Worth (ppm/%Δρ)
0	132.68	138.43
100	132.64	138.40
200	132.61	138.37
300	132.57	138.33
400	132.53	138.30
500	132.49	138.26
600	132.45	138.22
700	132.40	138.18
800	132.35	138.13
900	132.31	138.08
1000	132.25	138.04
1100	132.20	137.98
1200	132.15	137.93
1300	132.09	137.88
1400	132.03	137.82
1500	131.97	137.76
1600	131.91	137.70
1700	131.85	137.63
1800	131.78	137.57
1900	131.72	137.50
2000	131.65	137.43
2100	131.58	137.36
2200	131.50	137.29
2300	131.43	137.21
2400	131.35	137.14
2500	131.28	137.06
2600	131.20	136.98
2700	131.12	136.89
2800	131.03	136.81
2900	130.95	136.72
3000	130.87	136.64
3100	130.78	136.55
3200	130.69	136.45
3300	130.60	136.36
3400	130.51	136.26
3500	130.41	136.17
3600	130.32	136.07
3700	130.22	135.97
3800	130.12	135.87
3900	130.02	135.76
4000	129.92	135.66
4100	129.82	135.55
4200	129.71	135.44
4300	129.61	135.33
4400	129.50	135.22
4500	129.39	135.10
4600	129.28	134.99
4700	129.17	134.87
4800	129.06	134.75
4900	128.95	134.63
5000	128.83	134.51
5100	128.71	134.39
5200	128.59	134.26

Burnup (^{MWD} / _{MTU})	HZP Inverse Boron Worth (ppm/%Δρ)	HFP Inverse Boron Worth (ppm/%Δρ)
5300	128.48	134.13
5400	128.35	134.01
5500	128.23	133.88
5600	128.11	133.75
5700	127.98	133.61
5800	127.86	133.48
5900	127.73	133.34
6000	127.60	133.21
6100	127.47	133.07
6200	127.34	132.93
6300	127.21	132.79
6400	127.07	132.65
6500	126.94	132.50
6600	126.80	132.36
6700	126.67	132.21
6800	126.53	132.07
6900	126.39	131.92
7000	126.25	131.77
7100	126.11	131.62
7200	125.96	131.46
7300	125.82	131.31
7400	125.68	131.15
7500	125.53	131.00
7600	125.38	130.84
7700	125.24	130.68
7800	125.09	130.52
7900	124.94	130.36
8000	124.79	130.20
8100	124.63	130.04
8200	124.48	129.87
8300	124.33	129.71
8400	124.17	129.54
8500	124.02	129.37
8600	123.86	129.20
8700	123.70	129.03
8800	123.54	128.86
8900	123.38	128.69
9000	123.22	128.52
9100	123.06	128.35
9200	122.90	128.17
9300	122.74	128.00
9400	122.57	127.82
9500	122.41	127.64
9600	122.24	127.46
9700	122.08	127.28
9800	121.91	127.10
9900	121.74	126.92
10000	121.57	126.74
10100	121.40	126.56
10200	121.23	126.37
10300	121.06	126.19
10400	120.89	126.01
10500	120.72	125.82

FIGURE 2-II.B.1
HZP INTEGRAL CEA WORTH WITH OVERLAP
4,000 MWD/MTU TO 10,000 MWD/MTU
Regulating Bank Worth = 3.2729 %Δp
UNIT 2 CYCLE 15
(Page 4 of 5)

Group 5 (inches W/D)	Group 4 (inches W/D)	Group 3 (inches W/D)	HZP Integral CEA Worth (%Δp)
	72.00		0.681
	71.25		0.685
	70.50		0.689
	69.75		0.693
	69.00		0.697
	68.25		0.701
	67.50		0.705
	66.75		0.709
	66.00		0.713
	65.25		0.717
	64.50		0.721
	63.75		0.725
	63.00		0.729
	62.25		0.733
	61.50		0.737
	60.75		0.741
	60.00		0.745
	59.25		0.749
	58.50		0.753
	57.75		0.756
	57.00		0.760
	56.25		0.764
	55.50		0.767
	54.75		0.771
	54.00		0.774
	53.25		0.778
	52.50		0.781
	51.75		0.784
	51.00		0.787
	50.25		0.791
	49.50		0.794
	48.75		0.798
	48.00		0.802
	47.25		0.806
	46.50		0.810
	45.75		0.815
	45.00	135.00	0.820
	44.25	134.25	0.825
	43.50	133.50	0.831
	42.75	132.75	0.837
	42.00	132.00	0.844
	41.25	131.25	0.852
	40.50	130.50	0.860
	39.75	129.75	0.869
	39.00	129.00	0.879
	38.25	128.25	0.889
	37.50	127.50	0.899
	36.75	126.75	0.908
	36.00	126.00	0.918
	35.25	125.25	0.927
	34.50	124.50	0.936

Group 5 (inches W/D)	Group 4 (inches W/D)	Group 3 (inches W/D)	HZP Integral CEA Worth (%Δp)
	33.75	123.75	0.945
	33.00	123.00	0.953
	32.25	122.25	0.962
	31.50	121.50	0.970
	30.75	120.75	0.978
	30.00	120.00	0.986
	29.25	119.25	0.994
	28.50	118.50	1.002
	27.75	117.75	1.010
	27.00	117.00	1.019
	26.25	116.25	1.027
	25.50	115.50	1.036
	24.75	114.75	1.044
	24.00	114.00	1.053
	23.25	113.25	1.062
	22.50	112.50	1.071
	21.75	111.75	1.080
	21.00	111.00	1.089
	20.25	110.25	1.098
	19.50	109.50	1.107
	18.75	108.75	1.116
	18.00	108.00	1.124
	17.25	107.25	1.133
	16.50	106.50	1.142
	15.75	105.75	1.151
	15.00	105.00	1.159
	14.25	104.25	1.167
	13.50	103.50	1.175
	12.75	102.75	1.183
	12.00	102.00	1.191
	11.25	101.25	1.199
	10.50	100.50	1.206
	9.75	99.75	1.213
	9.00	99.00	1.220
	8.25	98.25	1.227
	7.50	97.50	1.233
	6.75	96.75	1.240
	6.00	96.00	1.246
	5.25	95.25	1.252
	4.50	94.50	1.258
	3.75	93.75	1.263
	3.00	93.00	1.269
	2.25	92.25	1.274
	1.50	91.50	1.280
	0.75	90.75	1.285
	0.00	90.00	1.290
		89.25	1.295
		88.50	1.300
		87.75	1.305
		87.00	1.310
		86.25	1.315

FIGURE 2-II.A.7
EXCESS REACTIVITY vs. BURNUP
HZP, ARO, NO XENON, EQUILIBRIUM SAMARIUM
UNIT 2 CYCLE 15
(Page 2 of 2)

Burnup (^{MWD} / _{MTU})	HZP Excess Reactivity (%Δρ)
0	16.280
100	16.205
200	16.131
300	16.057
400	15.984
500	15.911
600	15.839
700	15.767
800	15.697
900	15.628
1000	15.560
1100	15.494
1200	15.429
1300	15.365
1400	15.303
1500	15.242
1600	15.183
1700	15.124
1800	15.067
1900	15.011
2000	14.956
2100	14.903
2200	14.850
2300	14.799
2400	14.748
2500	14.698
2600	14.650
2700	14.602
2800	14.555
2900	14.509
3000	14.464
3100	14.420
3200	14.376
3300	14.333
3400	14.290
3500	14.249
3600	14.208
3700	14.167
3800	14.127
3900	14.088
4000	14.048
4100	14.010
4200	13.972
4300	13.934
4400	13.896
4500	13.859
4600	13.822
4700	13.785
4800	13.748
4900	13.712
5000	13.675
5100	13.639
5200	13.603
5300	13.567

Burnup (^{MWD} / _{MTU})	HZP Excess Reactivity (%Δρ)
5400	13.530
5500	13.494
5600	13.458
5700	13.421
5800	13.384
5900	13.348
6000	13.310
6100	13.273
6200	13.235
6300	13.197
6400	13.159
6500	13.120
6600	13.081
6700	13.041
6800	13.001
6900	12.960
7000	12.919
7100	12.877
7200	12.835
7300	12.791
7400	12.748
7500	12.703
7600	12.659
7700	12.613
7800	12.567
7900	12.521
8000	12.474
8100	12.426
8200	12.378
8300	12.330
8400	12.281
8500	12.232
8600	12.182
8700	12.131
8800	12.081
8900	12.029
9000	11.978
9100	11.926
9200	11.873
9300	11.820
9400	11.767
9500	11.713
9600	11.659
9700	11.605
9800	11.550
9900	11.495
10000	11.440
10100	11.384
10200	11.328
10300	11.272
10400	11.215
10500	11.159
10600	11.101
10700	11.044

Burnup (^{MWD} / _{MTU})	HZP Excess Reactivity (%Δρ)
10800	10.986
10900	10.928
11000	10.870
11100	10.812
11200	10.754
11300	10.695
11400	10.636
11500	10.577
11600	10.517
11700	10.458
11800	10.398
11900	10.339
12000	10.279
12100	10.219
12200	10.159
12300	10.098
12400	10.038
12500	9.978
12600	9.917
12700	9.857
12800	9.796
12900	9.735
13000	9.675
13100	9.611
13200	9.547
13300	9.484
13400	9.420
13500	9.356
13600	9.292
13700	9.228
13800	9.164
13900	9.100
14000	9.036
14100	8.972
14200	8.908
14300	8.844
14400	8.780
14500	8.716
14600	8.652
14700	8.588
14800	8.524
14900	8.460
15000	8.395
15100	8.331
15200	8.267
15300	8.203
15400	8.138
15500	8.074
15600	8.010
15700	7.946
15800	7.881
15900	7.817
16000	7.753
16100	7.688

Burnup (^{MWD} / _{MTU})	HZP Excess Reactivity (%Δρ)
16200	7.624
16300	7.559
16400	7.495
16500	7.431
16600	7.366
16700	7.302
16800	7.237
16900	7.173
17000	7.108
17100	7.044
17200	6.979
17300	6.915
17400	6.850
17500	6.786
17600	6.721
17700	6.657
17800	6.592
17900	6.527
18000	6.463
18100	6.398
18200	6.334
18300	6.269
18400	6.205
18500	6.140
18600	6.075
18700	6.011
18800	5.946
18900	5.881
19000	5.817
19100	5.752
19200	5.688
19300	5.623
19400	5.558
19500	5.494
19600	5.429
19700	5.364
19800	5.300
19900	5.235
20000	5.170
20100	5.106
20188	5.049
20200	5.041
20300	4.976
20400	4.912
20500	4.847
20600	4.782
20700	4.718
20800	4.653
20900	4.588
21000	4.524
21100	4.459
21200	4.394
21300	4.330
21308	4.325

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE SROTAGGING (2004)

TASK: 204.068 Establish Initial Conditions for and approve issuance of a safety tagout
PURPOSE: Evaluates an Operator's ability to coordinate maintenance activities per MN-1-101
and NO-1-112

JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE SRO TAGGING (2004)

ELEMENT STANDARD
(* = CRITICAL STEP)

PERFORMER'S NAME: _____

APPLICABILITY:

SRO

PREREQUISITES:

Completed Initial Licensed Operator Administrative Procedures training

EVALUATION LOCATION:

_____ PLANT _____ SIMULATOR _____ CONTROL ROOM

EVALUATION METHOD:

_____ ACTUAL PERFORMANCE _____ DEMONSTRATE PERFORMANCE

ESTIMATED TIME
TO COMPLETE JPM:

10 MINUTES

ACTUAL TIME
TO COMPLETE JPM:

_____ MINUTES

TIME CRITICAL TASK:

NO

TASK LEVEL:

LEVEL 1

TOOLS AND EQUIPMENT:

Copy of tagout for 1MOV514, 1200200332 and Integrated work schedule for Dec. 22, 2003

REFERENCE PROCEDURE(S):

NO-1-112, MN-1-101, NO-1-117

TASK STANDARDS:

This JPM is complete when the clearance request for 1-MOV-514 is rejected.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE SRO TAGGING (2004)**

ELEMENT (* = CRITICAL STEP)	STANDARD
---------------------------------------	-----------------

TIME START _____

CUE: Provide the candidate with Clearance number 1200200332 package-(orange folder) and the Integrated Work Schedule.

_____ Identify & locate Attachment 7 of the Integrated Work Schedule and NO-1-112

Same as element. (Candidate is not required to reference NO-1-112).

5.10.E OWC/CRS Review

_____ The reviewers shall:

- * _____ Ensure that Tech Specs are not violated, and that plant operation will not be endangered by the Clearance controls to be created or changed

Reviews Clearance Order and Integrated Work Schedule and identifies that 1-MOV-509 has work planned on the schedule and 1-MOV-514 does not.

Concludes that risk assessment of 1-MOV-514 testing must be performed prior to authorizing clearance.

TIME STOP _____

TERMINATING CUE: This JPM is complete when the candidate has determined that the clearance cannot be hung without a risk assessment being performed per NO-1-117. No further actions are required.

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE SRO TAGGING (2004)

TASK: 204.068 Establish Initial Conditions for and approve issuance of a safety tagout

Document below any instances of failure to 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.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL
ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

COMMENTS:

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

SATISFACTORY

UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

5.10.D Clearance Order Approvals (Continued)

- If the Job Supervisor or the immediate Supervisor is unavailable onsite, approval may be obtained via telephone.
 - Telephone permission should be annotated on the Clearance Order form.
- In the event of an emergency when the Job Supervisor or the immediate supervisor is unavailable on site or by telephone, the Shift Manager may sign as Job Supervisor.
 - Job Supervisor approval should be obtained as soon as possible.

E. OWC/CRS Review [B0552]**NOTE**

The OWC/CRS shall not perform both the 1st review and approve a clearance for restoration.

1. OWC/CRS approval is required for all Clearance Orders.
2. The OWC/CRS shall:
 - Ensure that Tech Specs are not violated, and that plant operation will not be endangered by the Clearance controls to be created or changed.
 - Ensure for Tech Spec or Technical Requirements Manual (TRM) -related equipment, that any equipment inoperability is recorded according to the requirements of NO-1-204, Plant Logs.
 - Ensure that any redundant equipment testing to satisfy Technical Specifications or TRM prior to removing equipment from service is performed. [B0554]
 - Ensure that all equipment needed to set the required Clearance controls is properly secured.
 - During Modes 5 and 6, closely monitor RV water level any time a valve line-up change is made which could affect RCS inventory. [B0554] [B0138]
 - Ensure that all required reviews and approvals have been obtained, or have been properly exempted, in accordance with this procedure.

5.10.E Clearance Order Approvals (Continued)

- Ensure that the required Clearance Item positions and sequences are appropriate for current and anticipated plant conditions.

NOTE

The OWC/CRS is responsible to verify the position of restoration items per the applicable Operating Instruction or Operating Procedure.

- Ensure that any components left in a position differing from their normal position are marked and annotated in the restoration note field for that Clearance Item in accordance with this procedure.
- Ensure that all items on the Restoration Items list have been considered.
- Review the Tagging Reminders.
- Sign the Clearance Order for Order Approved.

F. Tagging Office

1. On some occasions it will be necessary to change a Clearance Order after it has been written, but before any maintenance has been authorized (i.e. – before stubs are issued). Some examples are:
 - The scope of the work has changed from the original plan.
 - One of the original Clearance items is unavailable and other equipment must be used.
 - The intended boundary is no longer practical.
- To change a Clearance Order after the second review has been completed, the Clearance Order change must undergo a sufficient review to ensure worker or plant safety is not compromised.
 - If a change is made it must be prepared and reviewed using the same guidance as would applied to a new Clearance Order.
 - The change shall be signed and dated in accordance with this procedure before the change is implemented.
 - If the Clearance Order in question has already been performed, it should be changed by the use of another approved Clearance Order.
- After the review process, the change shall be performed per the appropriate steps of this procedure.

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE

TASK: 204.068

DIRECTIONS TO TRAINEE:

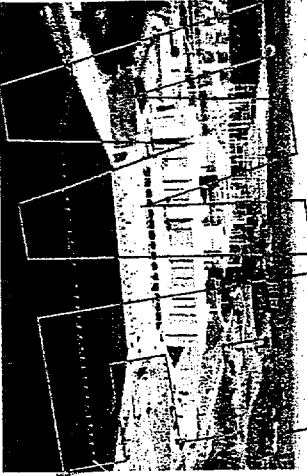
1. To complete the task successfully, you must:
 - perform each critical element correctly. You must inform the evaluator of the indications you are monitoring. Where necessary, consider the evaluator to be the CRS.
 - comply with industrial safety practices, radiation safety practices and use of event free tools. **NOTE: Violation of safety procedures will result in failure of the JPM.**
2. Initial Conditions:
 - a. Unit-1 is at 100% power.
 - a. A tagout to allow VOTES test 1-MOV-514 has been written.
 - b. You are performing the duties of the CRS.
3. Initiating Cue: A safety tagger has requested that you review the tagout for approval to remove the equipment from service and hang the tags per NO-1-112 section 5.10.E. **It is Tuesday, December 23, 2003.** Are there any questions? You may begin.

CALVERT CLIFFS NUCLEAR POWER PLANT

PLANT STATUS / INTEGRATED WORK SCHEDULE

Monday, December 22, 2003

Work Week 0351



UNIT 1
 Power: 100%
 4 A.M. Thermal 2698
 4 A.M. Load: 871 MWe Net
 RCS Leak Rate: 0.04 GPM
 Trip Risk: Low
 PRA Risk: Low

UNIT 2
 Power: 100%
 4 A.M. Thermal 2692
 4 A.M. Load: 882 MWe Net
 RCS Leak Rate: 0.06 GPM
 Trip Risk: Low
 PRA Risk: Low

UNIT	SCHEDULED GENERATION REDUCTIONS	DATE/TIME	DURATION	POWER	MW/E	RISK CLASS
UNIT	HIGH RISK WORK					
UNIT	TS ACTION STATEMENT (P=PLANNED, U=UNPLANNED)/CHEM ACTION LVL	50% LCO	EXPIRES	ECD		
1	TS 3.3.10.A & B - PAM Instrumentation (RVLMS Ch A OOS) (U)	2/18/03	NA	Report Submitted		
1	TRM 15.3.1.B - Radiation Monitoring Instrumentation (11 MSL RMS OOS)(U)	10/11/03 0750	10/14/03 1950	12/5/03		
1	TRM 15.0.3 Radiation Monitoring Instrumentation (11 MSL RMS OOS)(U)	NA	NA	12/5/03		
2	TRM 15.4.3.A - ASME Code Class 1, 2, 3 Components (2PDT123A leak) (U)	NA	NA	Leak Isolated-TBD		

WWC: Jim Carberry X-4118/Bpr #3470
 (Cell #443-532-0338)

RCSS : X-4946
 SWPC: X-4943
 OWC: X-7367

"Keep it safe and clean"

* Business Confidential *

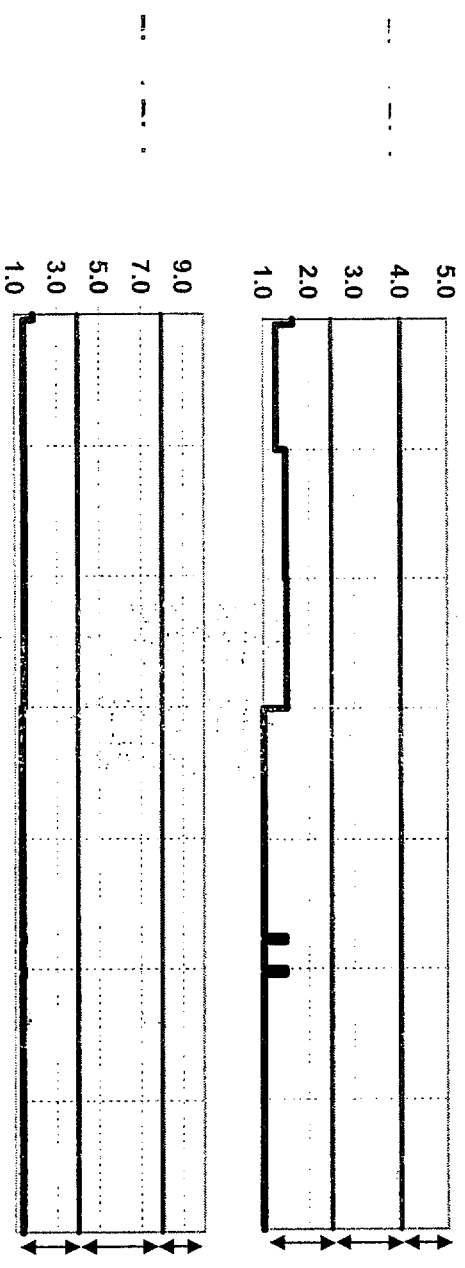
PRA Evaluator: Mark Graham
 Phone: 4319 (work) / 410-394-6120 (home)
 Pager: 405-3534 (off-hours - call home first)

Unit One

QSS Week 0351 - Risk Evaluation Rev. 2
 Evaluated on 12/16/2003

WWC: Jim Carberry
 Phone: 4118 (work)
 Pager: 405-3470

	12/22/03	12/23/03	12/24/03	12/25/03	12/26/03	12/27/03	12/28/03	Weekly ICDP	Weekly ILERP
Daily Plant Trip Risk Level	L	L	L	L	L	L	L	L	L
Daily Peak Plant Trip Risk Factor	1.65	1.49	1.51	1.01	1.48	1.48	1.01	2.96E-07	1.27E-08
Daily CDF Risk Level	L	L	L	L	L	L	L		
Daily Peak CDF Risk Factor	1.88	1.45	1.45	1.36	1.42	1.42	1.36		
Daily LERF Risk Level	L	L	L	L	L	L	L		
Daily Peak LERF Risk Factor	1.90	1.48	1.49	1.39	1.45	1.45	1.39		



Notes

The highest peak trip risk occurs on Monday and is classified as a Low (1.65).
 This risk occurs for 0.25 hours and is associated with 1-047 - Inspect 1MOV3723, 1-045 - 12 SGFP Seal Wtr Booster Pump Unavailable, 2-102 - Painting in U2 CSR, 0-004 - SBM HS - Plastic Degradation (Cracks), 1-064 - 11B RCP - 1 seal stage failed, 1-024 - STP-O-008A-1 (SIAS Part)

The highest peak CDF risk occurs on Monday and is classified as Low (1.88).
 This risk occurs for 0.17 hours and is associated with 1-024 - STP-O-008A-1 (UV Part), 1-047 - Inspect 1MOV3723, 1-045 - 12 SGFP Seal Wtr Booster Pump Unavailable, 2-102 - Painting in U2 CSR, 0-004 - SBM HS - Plastic Degradation (Cracks), 1-064 - 11B RCP - 1 seal stage failed

The highest peak LERF risk occurs on Monday and is classified as Low (1.90).
 This risk occurs for 0.17 hours and is associated with 1-024 - STP-O-008A-1 (UV Part), 1-047 - Inspect 1MOV3723, 1-045 - 12 SGFP Seal Wtr Booster Pump Unavailable, 2-102 - Painting in U2 CSR, 0-004 - SBM HS - Plastic Degradation (Cracks), 1-064 - 11B RCP - 1 seal stage failed

Daily Plant Trip Risk Level

Daily Peak Plant Trip Risk Factor

Daily CDF Risk Level

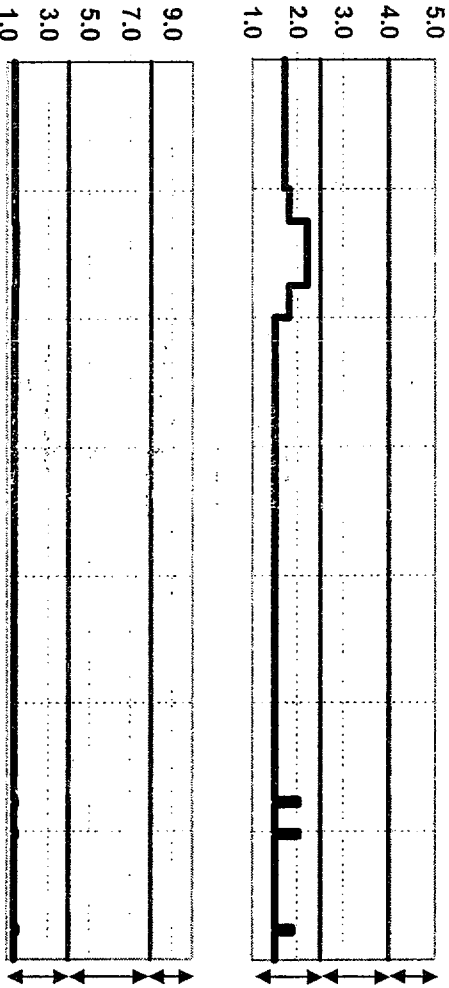
Daily Peak CDF Risk Factor

Daily LERF Risk Level

Daily Peak LERF Risk Factor

	12/22/03	12/23/03	12/24/03	12/25/03	12/26/03	12/27/03	12/28/03
Monday	L 1.72	L 2.22	L 1.51	L 1.51	L 1.51	L 2.02	L 2.02
Tuesday	L 1.37	L 1.43	L 1.35	L 1.35	L 1.35	L 1.41	L 1.46
Wednesday	L 1.43	L 1.50	L 1.41	L 1.41	L 1.41	L 1.47	L 1.52
Thursday							
Friday							
Saturday							
Sunday							

Weekly ICDP	Weekly ILERP
L 2.70E-07	L 1.24E-08



Notes

The highest peak trip risk occurs on Tuesday and is classified as a Low (2.22).

This risk occurs for 12.00 hours and is associated with 2-102 - Painting in U2 CSR, 2-043 - 21 Condenser Air Removal Unavailable-Winter, 0-004 - SBM HS - Plastic Degradation (Cracks), 2-030 - Scaffolding and work to seal conduits in Unit 2 Switchgear, 2-060 - 21 CEDM Cooler Unavailable, 2-062 - Replace ZHS5305 at IC34, 2-058 - STP-M-200-2 (All)

The highest peak CDF risk occurs on Sunday and is classified as Low (1.46).

This risk occurs for 0.17 hours and is associated with 2-102 - Painting in U2 CSR, 2-043 - 21 Condenser Air Removal Unavailable-Winter, 0-004 - SBM HS - Plastic Degradation (Cracks), 2-030 - Scaffolding and work to seal conduits in Unit 2 Switchgear, 2-024 - STP-O-008A-2 (UV Part)

The highest peak LERF risk occurs on Sunday and is classified as Low (1.52).

This risk occurs for 0.25 hours and is associated with 2-102 - Painting in U2 CSR, 2-043 - 21 Condenser Air Removal Unavailable-Winter, 0-004 - SBM HS - Plastic Degradation (Cracks), 2-030 - Scaffolding and work to seal conduits in Unit 2 Switchgear, 2-024 - STP-O-008A-2 (SIAS Part)

PRA Risk Significant Activities Evaluated by REU (See Note 1)

Description	Adjusted Start Date	Adjusted Start Time	Adjusted Stop Date	Adjusted Stop Time	Potential Failure Impact	Potential Failure Impact Discussion
	Start Date	Night Shift Last Week	Stop Date	Stop Time	Impact	Discussion
1-024 - STP-O-008A-1 (UV Part)	21-Dec	Night Shift	22-Dec	23:59	Green	n/a
1-024 - STP-O-008A-1 (SIAS Part)	21-Dec	Night Shift	22-Dec	23:59	Green	n/a
2-099 - U-2 Scaffolding in Cond Demin Precoat Area	22-Dec	0:00	22-Dec	23:59	Green	n/a
1-047 - Inspect 1MOV3723	22-Dec	0:00	24-Dec	23:59	Green	n/a
1-045 - 12 SGFP Seal Wtr Booster Pump Unavailable	22-Dec	0:00	28-Dec	23:59	Green	n/a
2-102 - Painting in U2 CSR	22-Dec	0:00	28-Dec	23:59	Green	n/a
2-043 - 21 Condenser Air Removal Unavailable-Writer	22-Dec	0:00	28-Dec	23:59	Green	n/a
0-004 - SBM HS - Plastic Degradation (Cracks)	22-Dec	0:00	28-Dec	23:59	N/A	With only 2-of-4 CARs required, a single CAR in an undetected fail state is not likely to cause a color change.
2-030 - Scaffolding and work to seal conduits in Unit 2 Switchgear	22-Dec	0:00	28-Dec	23:59	N/A	Not a maintenance activity.
1-064 - 11B RCP - 1 seal stage failed	22-Dec	0:00	28-Dec	23:59	Green	n/a
1-041 - 1MOV509 Unable to Open/Isolated	23-Dec	0:00	23-Dec	23:59	Green	This is a plant condition, not a maintenance activity.
2-060 - 21 CEDM Cooler Unavailable	23-Dec	0:00	23-Dec	23:59	Green	n/a
1-058 - U-1 Trip Breaker Swap-out	23-Dec	0:00	23-Dec	23:59	White	Potential impact of improper maintenance which leaves one TCB unable to open
1-047 - Inspect 1MOV3728	23-Dec	0:00	23-Dec	23:59	Green	n/a
2-062 - Replace ZHSS305 at 1C34	23-Dec	0:00	23-Dec	23:59	Green	n/a
2-058 - STP-M-200-2 (All)	23-Dec	Day Shift	23-Dec	23:59	Green	n/a
1-098 - U-1 Gen Excite Checklist	24-Dec	0:00	24-Dec	23:59	Green	n/a
1-093 - PE-1-093-ALL-O-W (Main Turbine PES)	26-Dec	Night Shift			Green	n/a
2-093 - PE-2-093-ALL-O-W (Main Turbine PES)	27-Dec	Night Shift			Green	n/a
2-021 - STP-O-008A-2 (SIAS Part)	28-Dec	Night Shift			Green	n/a
2-024 - STP-O-008A-2 (UV Part)	28-Dec	Night Shift			Green	n/a

See Note 2

Notes

- These are the activities scheduled for the week that are considered risk significant by REU. Any remaining items on the schedule have been screened as non-risk significant. If there are concerns with an item not listed here, then please contact the REU Evaluator for the OSS Week.
- These times have been conservatively adjusted from the scheduled times per the MR A4 Guidelines.

All Medium and High Risk Activities for QSS Week 0351 Rev: 2

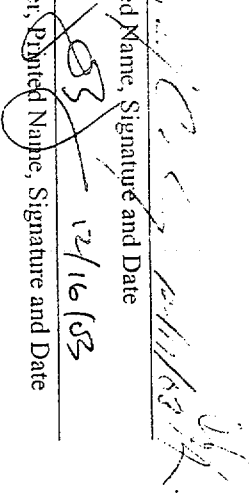
<u>Unit</u>	<u>Day</u>	<u>Start</u>	<u>Stop</u>	<u>Risk</u>	<u>Risk</u>	<u>Risk</u>	<u>Level</u>	<u>Value</u>	<u>Change</u>	<u>Description</u>
1	Mon	Sun	Sun	N/A	N/A	N/A	N/A	N/A	N/A	No Medium or High Risk Significant Activities on Unit 1
2	Mon	Sun	Sun	N/A	N/A	N/A	N/A	N/A	N/A	No Medium or High Risk Significant Activities on Unit 2


ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

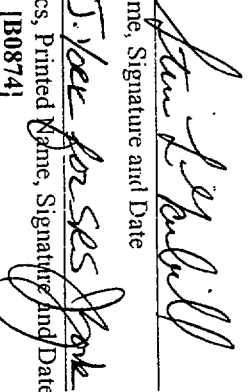
Attachment 5 Attachment 6 (Check One or Both, as applicable)

APPROVALS FOR QSS WEEK '0351'

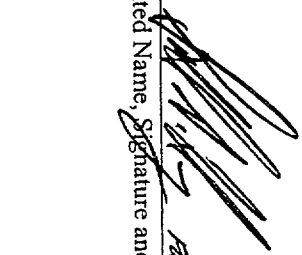
Jim Carberry 
WWC Printed Name, Signature and Date

Al Ball  12/16/03
HP Scheduler, Printed Name, Signature and Date

All Signatures for Pages 1 thru 4

Steve Gambill 
OWC Printed Name, Signature and Date

Steve Saunders  12/16/03
GS-Health Physics, Printed Name, Signature and Date
1B08741

Kent Mills 
GS-NPO Printed Name, Signature and Date

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE
SCHEDULE RISK ASSESSMENT SUMMARY TABLE
Attachment 5 ✓ Attachment 6 □ (Check One or Both, as applicable)

QSS Week 0351

Day	Maintenance Activity (System/Train/ Equipment)	Specific Affected System(s) Equipment	System Outage Window (SOW) Duration	Applicable M/O(s)	Lead RM/G(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Required)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3, Sect. 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
MON TUES & FRI	DEMOLITIZE AND SHIP RADIOACTIVE WASTE OFFSITE FOLLOWING 2003 RFO	102	ON GOING	N/A	PMG W/MG	EMR [H.11]	N/A	1.5,10,30,32	RISK DUE TO THE POTENTIAL TO CAUSE AN UNMONITORED RELEASE OR DISCHARGE OF RADIOACTIVE MATERIAL TO THE ENVIRONMENT
MON TUES & FRI	PERFORM THERMOGRAPHY ON VARIOUS LIGHTING PANELS & TRANSFORMERS	097	24	1200300522	SGEM	IMR [H.11]	N/A	1.5,10,30,32	RISK DUE TO POTENTIAL TO EXPOSE ELECTRICAL CONNECTIONS
MON & TUES	BUILD SCAFFOLD & SEAL CONDUITS U-2.27' SWGR ROOM FOR CONTROL ROOM HABITABILITY	030	20	2200303091	CATE	NMR [H.11]	N/A	1.5,10,17,18,30,32	RISK DUE TO WORKING IN TRIP SENSITIVE AREA - 27' SWGR ROOM
MON & TUES	OVERHAUL #12 SGFP SEAL WATER BOOSTER PP & REPLACE IHS4488.	044 045	37	1200302499 1200204970 1200300273 1200301339	FINE FINM MI	NMR [B.4]	N/A	1.5,10,17,18,30,32	RISK DUE TO REMOVING REDUNDANT EQUIPMENT FROM SERVICE
MON & TUES	U-2 CSR, PAINT WALLS & FLOOR & APPLY STENCILS	102	20	2199902243	CATP	NMR [H.11]	N/A	1.5,10,30,32	RISK DUE TO WORKING IN A TRIP SENSITIVE AREA, UNIT 2 CSR

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE
SCHEDULE RISK ASSESSMENT SUMMARY TABLE
Attachment 5 Attachment 6 (Check One or Both, as applicable)

QSS Week 0351

Day	Maintenance Activity (System/Train/Equipment)	Specific Affected System(s) Equipment	System Outage Window (SOW) Duration	Applicable MOC(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Required)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3, Sect. 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
MON	DISCHARGE MISC WASTE MONITOR TANK @ .5 mCi	071	4	N/A	OPS	EMR [H.1]	N/A	1,2,3,4,5,6,7,9,23, 26,27,29,30,32,37	RISK DUE TO IF PERFORMED INCORRECTLY COULD CAUSE UNPLANNED TERMINATION.
MON	REPLACE OLT2002, SFP LEVEL TRANSMITTER	067	11	0200300311	IM2	IMR [H.1]	N/A	1,5,10,30,32	RISK DUE TO WORKING WITHIN 3' OF SFP
TUE THRU FRI	SCAFFOLD SUPPORT, U-2 CPF MONORAIL BUS BARS	099	32	2200301193	MMC	NMR [H.1]	N/A	1,5,10,30,32	RISK DUE TO WORKING IN A TRIP SENSITIVE AREA, ABOVE CPF CV'S
TUES	INSPECT & LUBE IMOV509, 11 BAST GRAVITY FEED IAW MOV-12	041	11	1200302447	MOV	NMR [A.4]	N/A	1,5,10,17,18,30, 32	RISK DUE TO POTENTIAL TO AFFECT REACTIVITY MANAGEMENT VERIFY OI-49 OPERABILITY OF REDUNDANT SYSTEM PRIOR TO REMOVAL FROM SERVICE
TUES	STP M-211-2 SECONDARY CIA OOS ALARM CHECK	055	4	N/A	IM2	NMR [A.4]	3.1.4D 3.1.4E 3.1.6D TRM15.1.4A	1,5,10,17,18,30,32	RISK DUE TO WORKING ON EQUIPMENT THAT AFFECTS INDICATION OF REACTOR POWER OPS ESTABLISH PLANT CONDITIONS THE SHIFT BEFORE. DO NOT PERFORM AT SAME TIME AS STP M-200-2

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE
 SCHEDULE RISK ASSESSMENT SUMMARY TABLE
 Attachment 5 Attachment 6 (Check One or Both, as applicable)

OSS Week 0351

Day	Maintenance Activity (System/Train/Equipment)	Specific System(s) Affected Equipment	System Outage Window (SOW) Duration	Applicable MOC(s)	Lead RMG(s)	Results From Risk Assessment of Work Activity (MED/HIGH LOW w/ Reason or Comp. Actions Required)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3, Sect. 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
TUES	STP M-200-2 RX TRIP BRKR TEST	058	4	N/A	EM1	NMR [B.1 B.2]	N/A	1,8,10,17,1819, 30,32	RISK DUE TO BEING ON TRIP SENSITIVE EQUIPMENT. CONSIDER R/S IF MEG OR LMP IS IN EFFECT DO NOT PERFORM AT SAME TIME AS STP M-211-2
TUES	REMOVE SPARE TCB & INSTALL TCB-2 UNIT 1	058	1	1200302649	EM1	NMR [B.1 B.2 E.4]	N/A	1,5,10,17,18,30,32	RISK DUE TO WORKING ON TRIP SENSITIVE EQUIPMENT. POTENTIAL FAILURE IMPACT COLOR CHANGE TO WHITE. CONSIDER R/S IF MEG OR LMP IS IN EFFECT.
TUES	21 CEDM COOLING FAN INSPECT BRKR 52-2219 & 2HSS305	060	14	2200302888 2200302693	EM2 FINE	NMR [B.4]	N/A	1,5,10,17, 18,30,32	RISK DUE TO REMOVING REDUNDANT EQUIPMENT FROM SERVICE.
WED	INSPECT UI MN GEN EXCITATION EQ CHECKLIST AND BRUSH INSPECTION	098	3	1200301422	EM1	IMR [H.1]	N/A	1,8,9,10,17,22, 30,32	RISK DUE TO WORKING WITH VOLTAGES UP TO 500 VOLTS. CONSIDER R/S IF MEG OR LMP IS IN EFFECT
WED	DISCHARGE 12 RC WASTE MONITOR TANK @ 1.5 mCi	071	4	N/A	OPS	EHR [H.1]	N/A	1,2,3,4,5,6,7,9,23, 26,27,29,30,32,37	RISK DUE TO IF PERFORMED INCORRECTLY COULD CAUSE UNPLANNED TERMINATION.
FRI	PE-0-077-03-O-M S/G B/D RMS SOURCE CHECKS	077	1	N/A	OPS	CMR [H.1]	N/A	1,3,5,10,11,15,16, 17,28,30,32,36	RISK DUE TO B/D BEING OOS

ATTACHMENT 7, SCHEDULE RISK ASSESSMENT SUMMARY TABLE

SCHEDULE RISK ASSESSMENT SUMMARY TABLE

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

QSS Week 0351

Day	Maintenance Activity (System/Train/Equipment)	Specific Affected System(s) 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 Required)	Applicable Tech Spec Action Statement or TRM requirements	Considerations and Requirements (Att.3, Sect. 2)	Compensatory Actions / Contingency Plan for Work Activity (Section 2) / Comments
FRI PM	U-1 MAIN TURBINE PE'S 1-93-7-O-W 1-93-14-O-W 1-93-15-O-W 1-93-16-O-W	093	1	N/A	OPS	NMR [B.2 H.11]	N/A	1,8,10,30,32	SOBP APPROVAL REQUIRED CONSIDER R/S IF MEG OR LMP IS IN EFFECT
SAT PM	U-2 MAIN TURBINE PE'S 2-93-11-O-W 2-93-14-O-W	093	1	N/A	OPS	NMR [B.2 H.11]	N/A	1,8,10,30,32	SOBP APPROVAL REQUIRED CONSIDER R/S IF MEG OR LMP IS IN EFFECT
SUN	STP O-008A-2 2A EDG	024	4	N/A	OPS	NMR [B.1 B.2 B.3 B.6]	3.8.1.B 3.8.1.D	1,2,8,9,10,20,21,22,30,32	RISK DUE TO POTENTIAL LOSS OF A 4KV BUS. NO TRIP SENSITIVE WORK IN SWYD OR 13KV METALCLAD

ATTACHMENT 3, MANAGING AND APPROVING RISK SIGNIFICANT ACTIVITIES
(Page 1 of 4)

Section 1. MANAGING AND APPROVING RISK SIGNIFICANT ACTIVITIES		
A. MINIMUM TOOLS TO CONSIDER TO MANAGE RISK (as listed in Section 2)		
RISK	MEDIUM	HIGH
Nuclear	1, 5, 10, 17, 18, 30, 32	1 thru 9, 11, 14, 15 thru 19, 22, 23, 24, 27, 29, 30, 32, 33, 37, 38, 39, 40, 41
Industrial	1, 5, 10, 30, 32	1 thru 9, 19, 21, 23 thru 26, 29, 30, 32, 33, 37, 41
Environmental	1, 5, 10, 30, 32	1 thru 9, 23, 26, 27, 29, 30, 32, 33, 37, 41
Corporate	1, 3, 5, 10, 11, 14 thru 17, 28, 30, 32, 36	1 thru 9, 11, 14 thru 17, 22, 23, 24, 26 thru 32, 33, 36, 37, 41
Radiological	1, 10, 30, 42, 45 NOTE: Consult RGS & HPS to determine actions to manage risk.	2, 4, 6 thru 9, 26, 27, 30, 42 thru 45 NOTE: Consult GS-Responsible Group & GS-Health Physics to determine action to manage risk.
B. APPROVAL AUTHORITY FOR RISK SIGNIFICANT ACTIVITIES		
RISK	MEDIUM	HIGH *
Nuclear	Responsible Group Supervisor	RMG Manager. Manager will determine if a MOB shall be used to approve the activity and select members of the MOB. [B0670] Responsible GS & GS-NPO. [B0670]
Industrial	Responsible Group Supervisor	RMG Manager. Manager will determine if a MOB shall be used to approve the activity and select members of the MOB. Responsible GS & Supervisor - Nuclear Safety Services
Environmental	Responsible Group Supervisor	RMG Manager. Manager will determine if a MOB shall be used to approve the activity and select members of the MOB. Responsible GS, GS-Chemistry & GS-NPO.
Corporate	Responsible Group Supervisor	RMG Manager. Manager will determine if a MOB shall be used to approve the activity and select members of the MOB. Activity affects an on-line unit – Responsible GS, & GS-NPO Activity only affects an off-line unit – Responsible GS & Outage Director.

* RFO related activities: The M – IWM may request a MOB approval of the High Risk Activities.

ATTACHMENT 3, MANAGING AND APPROVING RISK SIGNIFICANT ACTIVITIES
(Page 2 of 4)

Section I. MANAGING AND APPROVING RISK SIGNIFICANT ACTIVITIES		
B. APPROVAL AUTHORITY FOR RISK SIGNIFICANT ACTIVITIES		
RISK	MEDIUM	HIGH *
Radiological	Responsible Group Supervisor	APPROVAL: GS - Health Physics, HPS and Line General Supv. ≥ 10 DAC ≥ 1 rem/h ≥ 500 mrem/entry ≥ 1 rem individual dose for the activity ≥ 10 rem beta dose rate to the skin ≥ 10 rem beta/gamma on contact dose rate to an extremity SRP Control Area
		APPROVAL: GS - Health Physics, HPS and Line General Supv., & Manager ≥ 25 DAC ≥ 5 rem/h ≥ 700 mrem/entry
		APPROVAL: GS - Health Physics, HPS and Line General Supv., Manager, & Plant General Manager ≥ 50 DAC ≥ 8 rem/h ≥ 1,000 mrem/entry
<p>NOTE: APPROVAL SIGNATURES INDICATED FOR RHR ACTIVITIES SHALL BE OBTAINED USING A MOB.</p> <p>NOTE: THE ROLES OF GS-HEALTH PHYSICS, HPS, AND LINE GS SHOULD BE FILLED BY SEPARATE INDIVIDUALS.</p>		

ATTACHMENT 3, MANAGING AND APPROVING RISK SIGNIFICANT ACTIVITIES
(Page 3 of 4)**Section 2. RISK MANAGEMENT TOOLS [B0614]****Actions to Manage Risk Significant Activities:**

1. Perform a Pre-Job Brief, involving the LT/C, with participants performing the tasks and support personnel directly supporting performance of the activity.
2. Designated Lead Point of Contact (DLPC) assigned to coordinate performance of activity.
3. RGS shall attend the Pre-Job Brief.
4. Prepare Attachment 9, High Risk Activity Plan [B0381]
5. Incorporate appropriate requirements from the ISM. Include review in pre-job brief.
6. Prepare Attachment 4, Post-Job Review for HIGH Risk Activities, or similar form.
7. RGSs are to provide field supervisory monitoring of the HIGH Risk activities, as determined by the approval authorities.
8. Schedule the activity in the Integrated Site Schedule and distribute as part of the POD. [B0381]
9. A procedure, instruction or Maintenance Order shall be used to control the conduct of the activity.
10. Provide field supervisory monitoring of the activity (job coverage) as determined by the RGS for MEDIUM Risk activities.
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 or management oversight for ITOE's/IMA's available on site for job coverage or reachable for support. [B0381]
14. Two-shift coverage required.
15. "Round-the-Clock" coverage required. Round the clock coverage may only be required for specific portions of the activity as appropriate.
16. Special coordination for equipment tagging required.
17. Parts and materials for the activity to be pre-staged and verified.
18. GS-NPO approval required for the activity plan and compensatory measures.
19. Tagout and activity walked down.
20. Switchyard Control House off limits for any other Risk Significant activities.
21. No activities shall be performed (approved) on redundant safety-related equipment at the same time, unless approved by GS-NPO.
22. Review OE and other industry information for applicability to this activity. For activities which have the potential or history to impact any safety category consult industry information for possible solutions and best practices (e. g. RCP seal replacement).
23. Task-experienced leaders selected to perform or directly oversee the activity.
24. Mock-up, rehearsal, simulator or other special training. is required to perform the activity. [B0381] [B0450]

ATTACHMENT 3, MANAGING AND APPROVING RISK SIGNIFICANT ACTIVITIES
(Page 4 of 4)**Section 2. RISK MANAGEMENT TOOLS [B0614]**

Actions to Manage Risk Significant Activities:

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 activity.
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 the activity as determined by the approval authorities.
30. RGS shall consider the use of Peer Checks for important job steps.
31. Project schedule reviewed by RGS and OWC.
32. Use of concurrent peer checks is mandatory for critical job steps. Critical job steps are those job steps which could immediately cause an undesirable result or an event if performed incorrectly.
33. Conduct a review of applicable procedure for correctness. [B0381] [B0450]
34. Utilize NO-1-103, Conduct of Lower Mode Operations, for planning as required.
35. When appropriate, the DLPC, HPS, and RGS should conduct a joint walkdown of the job site to verify preparation complete.
36. Plan the Maintenance Order IAW MN-1-123, Integrated Work Planning, if this is a Red or Yellow Maintenance Activity.
37. Develop "Contingency Plan" per Attachment 8, as appropriate, for "what could go wrong."
38. Evaluate the redundant/support components required to support the activity. (e.g. system deficiencies, system condition, PM status).
39. Prior to removing equipment from service perform an inspection of the redundant/support equipment. This inspection should be as detailed as possible.
40. Prior to releasing equipment for maintenance/activity perform a "confidence run" of the redundant/support equipment. Ensure redundant/support equipment operating parameters are stable and within spec.
41. Member of management, selected by lead RMG manager, to conduct management pre-job brief for ITOE's and IMA's per Attachment 15. [B0381]
42. Prepare Attachment 18, Pre-Job Briefing Checklist
43. Prepare ALARA Checklist (Refer to RSP 1-200)
44. Prepare RP High Risk Planning Checklist (Refer to MN-1-123)
45. Activity must be conducted under an SWP designed to support job tasks.

Unit 2 Maintenance Rule Unavailability Report for 12/22/2003

(Unavailability Groups that exceed 75% of their Performance Criteria are highlighted)

Unit	Maint Rule System	Unavailability Group	Performance Criteria	Two Year Value	Most Recent Unavailability	Unit	Maint Rule System	Unavailability Group	Performance Criteria	Two Year Value	Most Recent Unavailability
2	003A & 007	13KV Bus 21	< 200 Hours	0.00		2	048	ESFAS Ch ZA Logic Cabinet	< 100 Hours	13.45	02/01/2002
2	004A	4KV Bus 21 planned	< 4 Hours	0.00		2	048	ESFAS Ch ZA Sequencer	< 100 Hours	0.00	
2	004A	4KV Bus 24 planned	< 4 Hours	0.00		2	048	ESFAS Ch ZB Logic Cabinet	< 100 Hours	1.83	07/29/2002
2	005A	480V Bus 21A	< 2 Hours	0.00		2	048	ESFAS Ch ZB Sequencer	< 100 Hours	0.00	
2	005A	480V Bus 21B	< 2 Hours	0.00		2	048	ESFAS Sensor Channel ZD	< 100 Hours	60.10	12/04/2002
2	005A	480V Bus 24A	< 2 Hours	0.00		2	048	ESFAS Sensor Channel ZE	< 100 Hours	10.42	01/02/2003
2	005A	480V Bus 24B	< 2 Hours	0.00		2	048	ESFAS Sensor Channel ZF	< 100 Hours	31.87	07/05/2003
2	006	480V MCC - 204R	< 7 Hours	0.00		2	048	ESFAS Sensor Channel ZG	< 100 Hours	8.40	07/22/2003
2	006	480V MCC - 214R	< 7 Hours	0.00		2	052	HPSI Pump 21	< 50 Hours	10.18	09/02/2003
2	011	SRW Header 21	< 10 Hours	0.00		2	052	HPSI Pump 22	< 528 Hours	16.18	09/02/2003
2	011	SRW Header 22	< 10 Hours	0.00		2	052	HPSI Pump 23	< 50 Hours	11.50	09/02/2003
2	011	SRW Header 21	< 100 Hours	101.13	11/18/2003	2	058A	T/U 1. Power Level - High	< 300 Hours	125.70	07/16/2003
2	011	SRW Pump 21	< 100 Hours	13.32	11/03/2003	2	058A	T/U 2. Rate of Change Power	< 300 Hours	122.92	07/16/2003
2	011	SRW Pump 22	< 100 Hours	20.12	12/03/2003	2	058A	T/U 3. RC Flow - Low	< 300 Hours	76.08	10/01/2003
2	011	SRW Pump 23	< 100 Hours	56.23	10/09/2003	2	058A	T/U 4. SG Level - Low	< 300 Hours	48.93	01/28/2003
2	012	SW Header 21	< 75 Hours	54.77	09/15/2003	2	058A	T/U 5. SG Pressure - Low	< 300 Hours	65.28	01/28/2003
2	012	SW Header 22	< 300 Hours	61.92	12/03/2003	2	058A	T/U 6. Pr Pressure - High	< 300 Hours	81.78	07/05/2003
2	012	SW Pump 21	< 300 Hours	46.75	09/09/2003	2	058A	T/U 7. TMLP & ASGT	< 300 Hours	155.70	07/16/2003
2	012	SW Pump 22	< 300 Hours	50.27	09/02/2003	2	058A	T/U 8. Loss of Load	< 300 Hours	51.02	01/28/2003
2	012	SW Pump 23	< 102 Hours	63.57	09/03/2003	2	058A	T/U 9. Cmt Pressure - High	< 300 Hours	122.27	07/16/2003
2	015	CC HX 21	< 102 Hours	61.55	08/25/2003	2	058A	T/U 10. Axial Power Distribution	< 50 Hours	7.92	10/29/2003
2	015	CC HX 22	< 250 Hours	11.73	12/18/2002	2	060	22 CAG - Direct CAG Maint. Onl	< 50 Hours	11.92	02/05/2002
2	015	CC Pump 21	< 250 Hours	49.60	11/12/2003	2	060	23 CAG - Direct CAG Maint. Onl	< 50 Hours	22.07	07/23/2002
2	015	CC Pump 22	< 5 Hours	0.00		2	060	24 CAG - Direct CAG Maint. Onl	< 50 Hours	13.28	10/30/2003
2	015	CC Pump 23	< 5 Hours	0.00		2	060	CAG 21 & 22 due to SRW/SW M	< 500 Hours	252.47	10/10/2003
2	018	120V Vital AC Panel 2Y01	< 5 Hours	0.00		2	060	CAG 23 & 24 due to SRW/SW M	< 500 Hours	215.05	09/17/2003
2	018	120V Vital AC Panel 2Y02	< 5 Hours	0.00		2	061	CS Spray Header 21	< 90 Hours	19.36	08/23/2003
2	018	120V Vital AC Panel 2Y03	< 5 Hours	0.00		2	061	CS Spray Header 22	< 90 Hours	20.49	08/23/2003
2	018	120V Vital AC Panel 2Y04	< 700 Hours	535.35	07/29/2003	2	064A	Block Valve 2MOV/403	< 45 Hours	0.00	
2	019	Instrument Air Compressor 21	< 700 Hours	671.17	11/25/2003	2	064A	Block Valve 2MOV/405	< 45 Hours	0.00	
2	019	Plant Air Compressor 21	< 100 Hours	94.37	05/07/2003	2	064A	PORV 2ERV/402	< 100 Hours	18.87	05/16/2003
2	019	U-2 PA/A cross connect	< 100 Hours	13.73	11/20/2002	2	064A	PORV 2ERV/404	< 100 Hours	6.42	05/28/2003
2	024	Diesel generator 2A	< 200 Hours	311.42	10/13/2003	2	073	Hydrogen Recombiner 21	< 300 Hours	0.50	01/23/2003
2	024	Diesel generator 2B	< 220 Hours	72.13	10/01/2003	2	073	Hydrogen Recombiner 22	< 300 Hours	0.50	01/23/2003
2	032	ECCS pump Room Cooler 21	< 220 Hours	21.82	10/08/2002	2	083A	S/G 21 ADV - 2CV/3939	< 4 Hours	0.00	
2	032	ECCS pump Room Cooler 22	< 164 Hours	38.85	01/21/2003	2	083A	S/G 21 MSIV - 2CV/4043	< 4 Hours	0.00	
2	032	SWG Room HVAC Train 21	< 164 Hours	90.12	11/06/2003	2	083A	S/G 22 ADV - 2CV/3938	< 60 Hours	0.00	
2	032	SWG Room HVAC Train 22	< 164 Hours	80.60	10/20/2003	2	083A	S/G 22 MSIV - 2CV/4048	< 4 Hours	0.00	
2	036A	AFW Pump 21	< 130 Hours	2.17	08/20/2003	2	103	2A DG HVAC system	< 32 Hours	0.00	
2	036A	AFW Pump 22	< 130 Hours	4.82	12/04/2003	2	103	2B DG HVAC system	< 32 Hours	0.00	
2	036A	AFW Pump 23 to U-1	< 65 Hours	62.65	04/17/2003	2	103				
2	036A	AFW Pump 23 to U-2	< 25 Hours	28.65	01/06/2003						
2	036A	AFW S/G 21 Motor Train	< 25 Hours	0.00							
2	036A	AFW S/G 21 Steam Train	< 25 Hours	36.92	10/28/2003						
2	036A	AFW S/G 22 Motor Train	< 25 Hours	0.00							
2	036A	AFW S/G 22 Steam Train	< 25 Hours	24.57	04/15/2002						

Chemistry Key Parameter Report for Monday, December 22, 2003

Parameter	Date/Time of last sample	Result	Target Level	Notes
Unit 1 Reactor Coolant				
RCS-1 Boron	12/19/03 08:50	366 ppm	N/A	Mode 1 - 100% power
RCS-1 Chloride	12/19/03 08:50	<5 ppb	<20 ppb	
RCS-1 Fluoride	12/19/03 08:50	<5 ppb	<20 ppb	
RCS-1 Sulfate	12/19/03 08:50	<5 ppb	<20 ppb	
RCS-1 Oxygen	12/19/03 08:50	<5 ppb	<5 ppb	
U-1 S/G Blowdown				150 gpm Overboard
S/G 11 Chloride	12/21/03 00:10	1.2 ppb	<3.0 ppb	
S/G 11 Sodium	12/21/03 00:10	<0.1 ppb	<1.5 ppb	
S/G 11 Sulfate	12/21/03 00:10	0.9 ppb	<3.0 ppb	
S/G 12 Chloride	12/21/03 00:10	1.4 ppb	<3.0 ppb	
S/G 12 Sodium	12/21/03 00:10	<0.1 ppb	<1.5 ppb	
S/G 12 Sulfate	12/21/03 00:10	1.0 ppb	<3.0 ppb	
Chloride Average CPI	12/19/03 03:50	1.6 ppb	<1.6 ppb	
Sodium Average CPI	12/19/03 03:50	0.1ppb	<0.8 ppb	
Sulfate Average CPI	12/19/03 03:50	1.1 ppb	<1.6 ppb	
Unit 2 Reactor Coolant				Mode 1 - 100% power
RCS-2 Boron	12/19/03 09:55	1177 ppm	N/A	
RCS-2 Chloride	12/19/03 09:55	<5 ppb	<20 ppb	
RCS-2 Fluoride	12/19/03 09:55	<5 ppb	<20 ppb	
RCS-2 Sulfate	12/19/03 09:55	<5 ppb	<20 ppb	
RCS-2 Oxygen	12/19/03 09:55	<5 ppb	<5 ppb	
U-2 S/G Blowdown				50 gpm Overboard
S/G 21 Chloride	12/21/03 00:15	0.5 ppb	<3.0 ppb	
S/G 21 Sodium	12/21/03 00:15	<0.1 ppb	<1.5 ppb	
S/G 21 Sulfate	12/21/03 00:15	1.0 ppb	<3.0 ppb	
S/G 22 Chloride	12/21/03 00:15	<0.5 ppb	<3.0 ppb	
S/G 22 Sodium	12/21/03 00:15	<0.1 ppb	<1.5 ppb	
S/G 22 Sulfate	12/21/03 00:15	0.7 ppb	<3.0 ppb	
Chloride Average CPI	12/19/03 03:55	0.5 ppb	<1.6 ppb	
Sodium Average CPI	12/19/03 03:55	0.1 ppb	<0.8 ppb	
Sulfate Average CPI	12/19/03 03:55	0.8 ppb	<1.6 ppb	

Chemistry Out Of Target and Action Level Report for Monday, December 22, 2003

Out of Targets

Date Out of Target	Sponsor	Component	Parameter	Value (Target Value)	Planned Action

Action Levels

Date of Action Level	Sponsor	Component	Parameter	Value (Action Level Value)	Planned Action

December 19, 2003

Activities Rescheduled

MO	Priority	Description	Wk/tp	RMG	R/S Date	Reason
1200301051 2200300913	4	PERFORM VIB MONITORING ON U1 & U2 RCP'S & MTRS	W	M/CEU	12/22	INDIVIDUALS QUALIFIED TO PERFORM TEST ARE BOTH OUT SICK The late end dates for these PM's are 12/22 & 12/23.

Activities Not Finished as Scheduled

MO	Priority	Description	Wk/tp	RMG	R/S Date	Reason

Meetings:

- Tues., 12/23/03 9:00 T-13 Week 0412 / T-7 Week 0405(SSB-2 Conference Room)
- Tues., 12/23/03 T-1 Week – 0352 WW/C Rob Bartsch (0700 in OCC)
- Tues., 12/23/03 T-2 Week – 0353 WW/C Kevin Lanpher (0645 in OCC)

RMG	T	A	MO#	SYS	EQUIPMENT ID	PRI	M O K I D	D T S E	ASSIST ECD	R A C G	Work Description	Projected End Date	MO Age	CNT	
ASE	P3	0200302475	053	0SYS053		2	1	O	E13	12/24/2003	N	ATTEMPTS TO CLEAN OUT THE SUB SURFACE DRAIN LINE BETWEEN MH 3 AND 4		11	1
FINI	P3	1200303819	079	1R1C5421		2	1	L	A7	12/23/2003	N	1-R1C-5421 #11 MAIN STEAM LINE EFFLUENT MONITOR SPIKED UP TO .0025	01/09/2004	75	2
E12 12/19/2003															
FINM	P3	1200303619	042	1PUMPAMER11BNORTH	2	1	L	A7	12/23/2003	N	11B NORTH AMERTAP PUMP HAS A PIN HOLE IN IT'S VOLUTE.	01/07/2004	105	3	
M2	M1	2200303752	043	2PUMPCAR21		2	1	C	A7	12/30/2003	N	F DISASSEMBLE, INSPECT AND REASSEMBLE #21 GAR PUMP.	01/07/2004	77	4

S	A	F	T	RMG	MO#	SYS	Equipment	ID	G	P	T	ASSIST	ECD	CAP	Work Description	Work Restraints	Comments	Schedule Code	Projected End Date	MO Age	CNT
P1	EM1	0200300350	008	08KRF/PP1-9		F	A2	E9	PC						OHVDU-296, DEMINERALIZED WATER DUST SAMPLE ISOLATION VALVE FROZEN.			10520		306	1
		0200301473	004	0SYS004		Y	O								TRACKING ORDER FOR THE PRI-3 HANDSWITCHES WITH THE LEXAN CAM FOLLOWERS			05100	06/30/2004	167	2
		0200301474	004	0SYS004		Y	O								TRACKING ORDER FOR THE MH & MJ LEXAN CAM FOLLOWER REPLACEMENT SWITCHES			05100	03/11/2005	167	3
															THIS MO WILL TRACK ALL HANDSWITCH REPLACEMENTS DUE TO LEXAN CAM FOLLOWER ISSUE FOR BOTH UNIT'S. THIS MO WILL NOT BE PLANNED.						
															THIS MO WILL TRACK ALL MH AND MJ LEXAN CAM FOLLOWER REPLACEMENT SWITCHES FOR BOTH UNIT'S. THIS MO WILL NOT BE PLANNED.						
M1		1200303716	053	1PUMPSMP11INTK11		C	A7	P							11 INTAKE SUMP 11 PUMP, REPLACE PUMP			04081	03/05/2004	89	4
		1200304142	011	1RV1636		Y	E	E9	P						1RV1636 11 PAC, IMPLEMENT SETPOINT CHANGE PER ES200300653			0409119A	03/05/2004	38	5
															2RV1636 21 PAC, IMPLEMENT SETPOINT CHANGE PER ES200300653			0418219A	05/07/2004	38	6
M2		2200304139	011	2RV1636		Y	E	E9	P						23 AFW PP O.B. BRG, CHANGE OIL, INSPECT O.B. BEARING & CHECK THRUST			04102	03/12/2004	7	7
WS1		0200302045	053	0SYS053		E									THE INTAKE SUMP PUMP COVER STRUCTURE THAT SUPPORTS THE DISCHARGE			04080	03/05/2004	53	8
P2	FINE	0200301776	099	0CRNABCSKHDLM		Y	L	E2	PC						CONTINGENCY MO TO REPLACE SPEED SWITCH ON SFP CASK HANDLING CRANE			0427099A	07/09/2004	101	9
P3	FINI	2200303550	083	2FRPR3965		Y	L	E9							RECEIVED #21 SGFP SPEED CONTROL SYSTEM TROUBLE ALARM "C-44". THIS WAS					109	10
		2200305370	064	2LI110Y		E	A	E12							UNIT 2 PRESSURIZER LEVEL INDICATOR 2-LI-110Y AT 2C43 IS INDICATING 190			12/12/2003		14	11

NUCLEIS

ST	RMG	MO#	SYS Equipment ID	FKID	WSSO	ASST	EDD	CAP	Work Description	Work Restraints Comments	Schedule Code	Projected End Date	MO Age CNT
P3	FINM	1200303951	042 1PUMPAMER13GNORTH	E	A7	12/23/03			OVERHAUL #13B NORTH AMERTAP PUMP DUE TO LOW FLOW.				55 12
		1200304125	044 1PUMPCD13	Y	E				13 CONDENSATE PUMP HAS OXYGEN LEAKS. WE NEED TO LOOK FOR LEAKS AS				39 13
		1200304614	034 1HSS821	C					1-HS-5821 12 CPF B/W WTR SOLIDS SUMP PP IS INOPERABLE.				3 14
		2200303927	042 2PUMPAMER21BSOUTH	E	A7	12/23/03			21B SOUTH AMERTAP PUMP HAS LOW FLOW (231 GPM) AS MEASURED WITH				55 15
		2200304205	032 2F15426-2	E					21 SWITCH GEAR HVAC CIRCUIT 2 LIQUID LINE SIGHT GLASS IS ICED OVER MA1			12/19/2003	32 16
M1		2200305438	053 2PUMPSMP12INTK21	E					12 INTAKE STRUCTURE SUMP 21 PUMP HAS 2 LEAKS AT DISCHARGE FLANGE.				10 17
		2200305439	053 2PUMPSMP12INTK22	C					12 INTAKE STRUCTURE SUMP 22 PUMP HAS SEPARATED FROM ITS DISCHARGE				10 18
		2200305480	053 2PUMPSMP13INTK21	C					INTAKE STRUCTURE SUMP NO. 13, 21 PUMP IS NOT PUMPING WATER OUT OF THE				7 19
P5	IM2	2200302023	078 2HS015B	L					REPLACE 2HS015B, WRNI CHANNEL SELECTOR SWITCH AT 2C43				245 20
M1		1200303929	046 1BTV1438	L	TAG				REPLACE 1BTV1438 COUNTER WEIGHT KEY AND BUSHING AS REQ'D.				55 21
		1200303930	046 1BTV1432	L	TAG				REPLACE 1BTV1432 COUNTERWEIGHT ARM KEY AND BUSHING AS REQ'D.				55 22
M2		0200301749	053 2PUMPTBSMP22/PP22	O	S				CLEAN 22 TURB. BLDG. SUMP P1T.			12/19/2003	108 23
		2200303906	046 2BTV1436	L	TAG				REPLACE 2BTV1436 COUNTERWEIGHT ARM KEY AND BUSHING AS REQ'D.				55 24
MS1		1199903557	042 1SYS042	F	AT	12/31/03	TAG		FAB & ADD DRIP PAN UNDER #11 WATERBOX PRIMING PUMP PER ESP-199900984.			0408142A 02/27/2004	1579 25
MS2		2199903349	042 2PUMPMABF21	Y	F	TAG			FAB & INSTALL A DRIP PAN UNDER #21 WBP PP.PER ESP#199900984-000.			0413242A 02/20/2004	1579 26

S	T	A	RNG	MO#	SYS Equipment ID	F K I D	E T S E	G P T	A S S I S T	E C D	C A P	Work Description	Work Restraints Comments	Schedule Code	Projected End Date	MO Age CNT	
P5	WS2		2200303124	042	2PUMPWPB23	Y	F	Y	F	TAG		FAB & ADD DRIP PAN UNDER #23 WPB PP. PER ESP #199900984-000.		0411242C	03/19/2004	157	27
P8	M1		0200302181	103	ODAMPHVAC10587B	Y	E	Y	A	TAG		OC DG BUILDING AHU-2 BYPASS DAMPER (D-6) IS DEGRADED. BUSHINGS ARE		04040	01/30/2004	38	28
												REPLACE 1B DG CRANKCASE AND LUBE OIL DAY TANK OIL PER ES200300611		0402124B	01/14/2004	63	29
												AT 01/16/04					
P9	WS1		1200302998	042	1PUMPWPB12	Y	E	Y	E	TAG		#12 WATERBOX PRIMING PUMP MOTOR BASE HAS HEAVY CORROSION DAMAGE		0410142B	03/12/2004	157	31
												REPLACE #11 CONTAINMENT TENDON SUMP PUMP.		04101	03/12/2004	39	30
WS2			2200303123	042	2PUMPWPB22	Y	E	Y	E	TAG		#22 WATERBOX PRIMING PUMP AND MOTOR BASE HAS HEAVY CORROSION DAMAGE.		0409242B	03/05/2004	157	32
S1	IM1		1200302678	045	1Z11111A			O				REMOVE METAL OXIDE VARISTORS FROM FRV POSITION INDICATORS @ 1C1111		04031	01/23/2004	186	33
												CONDUIT AND CONDULET AIP0344 AND THE CONNECTORS ON 1J5049, IN THE		0404142	01/30/2004	853	34
SGEM			0200101689	042	OSYS042			F				IMPLEMENT ESP #199502487 ALLOW BY-PASS LINE AROUND ALARM CHECK VALVE		0402113	01/16/2004	248	35
S3	M2		0200300955	013	0CKVFP-211			C				OVERHAUL #23 CHARGING PUMP DISCHARGE DESURGER.		0407241E	02/27/2004	497	36
												REMOVE CONTAMINATED OIL FROM 22 MSIV		04012	01/12/2004	111	37
S4	M1		1200303202	041	1ACC233X	Y	G	Y	G	TAG		OVER-HAUL 11 CHARGING PUMP DISCHARGE DESURGER		0352141C	01/05/2004	140	38
												OVER-HAUL 23 CHARGING PUMP SUCTION STABILIZER		0407241E	02/27/2004	284	39
M2			2200303590	041	2ACCSTABILIZER22	Y	G	Y	G	TAG		OVER-HAUL 22 CHARGING PUMP SUCTION STABILIZER		0401241D	01/09/2004	103	40

N U C L E I S
System Performance Deficiency MO's Report

S	T	A	T	RMG	MO#	SYS Equipment ID	F K I D	W S O	A S S I S T	CAP	Work Description	Work Restraints Comments	Schedule Code	Projected End Date	MO Age CNT	
M1	M1				1200303842	083 1CV40480P	Y	L	E	CD	CAP2	PERFORM FEED AND BLEED OF 12 MSIV RESERVOIR		03501	12/19/2003	69 41
M2	M2				2200102943	042 2SYS042	E					23B AMERTAP: THE SIGHT GLASSES ON THE UNIT 1 AND UNIT 2 AMERTAP		0350242	12/22/2003	860 42
MS1					1199805852	042 1PUMPWBP13	Y	E				BASE PLATE TROUGH FOR #13 WATER BOX PRIMING PP IS BADLY CORRODED.		03421	12/11/2003	1831 43
M2	M2				1200303873	032 1FL5418	Y	L	TAG			11, 12 SFP EXHAUST FAN, REPLACE HEPA FILTERS		0401132P	01/09/2004	62 44

MO#	RMG	SYS Equip. Id	P I G T	E Assist	ECD	Description	Action Item	AIT Due Date	Sched Code	MO Projected End Date	CNT
0200302099	FINE	064 OSYS064	0	4	P3 1	INSPECT GTU'S IN WAREHOUSE	IR200300320	08-MAR-04			1
1200302116	WS1	041 1HVCVC-1283	F	3	S3 1 N	ADD SAMPLING SINK TO SERVICE THE BAST SAMPLE LINES WITHIN THE ROOM.	IR200200790	11-JUN-04	04031411	01/30/04	2
1200303842	M1	083 1CV40480P	L	3	Y W1 1	PERFORM FEED AND BLEED OF 12 MSIV RESERVOIR	IR200300398	26-APR-04	03501	12/19/03	3
1200304610	IM1	012 1CV51530P	0	4	Y P1 1	PERFORM AIRCET DIAGNOSTIC TEST ON 1CV5153 WHEN THE OPS STP 06SP-1 IS P			04221		4
2200302252	WS2	041 2HVCVC-1256	F	3	Y P9 1 N	ADD SAMPLING SINK TO SERVICE THE BAST SAMPLE LINES WITHIN THE ROOM.	IR200200790	11-JUN-04	0419241K	05/21/04	5
2200303509	M2	083 2CV40480P	L	3	Y S3 1	REMOVE CONTAMINATED OIL FROM 22 MSIV	IR200300398	26-APR-04	04012	01/12/04	6

ACTIVITY ID	DESCRIPTION	START DATE	STOP DATE	DURATION	STATUS	FINISH DATE	21	22	23	24	25	26
047	LH32185120 #4 REPAIR INSULATION ON 16" GB-2-1016 PPG.	1200302185		11*	BNI	18DEC03 14:00A						
047	LH32185130 #5 R/R INSULATION ON 10CV1421/ASSOC HB-8 PPG.	1200302185		10	BNI	22DEC03 09:00						
083	PO30351130 P/O (I) INSUL TO GB2 4 PPG.	1200300351		49*	BNI	18DEC03 07:00A						
CADM												
102	KL131976040 P/O DEMO IOB	0200301976		104*	PMG	10DEC03 13:00A						
102	KL131976055 P/O FINAL BLANK OFF FIRE MAIN	0200301976		3	PMG	23DEC03 11:00						
CATE												
030	LH32960190 SEAL CONDUITS 1C CBLE CHASE FOR C.R.	1200302960		30*	CATE	16DEC03 08:00A						
030	LH32960145 CONTINUE SEAL CONDUITS U-1 PURGE AIR RM.	1200302960		5	CATE	22DEC03 08:00*						
030	LH33091510 SEAL CONDUITS U-2 27SWG FOR C.R. HABITABILITY	2200303091		10	CATE	23DEC03 12:00*						
CATL												
102	LH01125100 PREP & REPAIR SPLALLING CONCRETE ON THE INTK	1200001125		387*	CATL	20OCT03 13:00A						
102	WR73566200 REPAIR THE DETERIORED CONCRETE WALL IN #12 SW	1199703566		387*	MC	20OCT03 13:00A						
CATP												
102	LH92243500 U-2 CSR: PAINT WALLS & COLUMNS	2199902243		84*	CATP	15DEC03 11:00A						
102	LH92243520 U-2 CSR: PAINT FLOOR & APPLY STENCILS	2199902243		45	CATP	22DEC03 07:00*						
CHEM												
083	HG31151230 ANALYSE OIL SAMPLE 11 & 12 MSIV	1200301151		2	M1	26DEC03 09:00						
CM												
024	BE20171110 INSTALL UPS PER ESS200200422 ON 1A DIESEL MRD	1200200171		2	CM	22DEC03 08:00						
024	BE20171130 INSTALL UPS PER ESS200200422 ON 0C DIESEL	1200200171		2	CM	22DEC03 11:00						

Start Date 01JUN03 01:00
 Finish Date 23DEC04 12:59
 Data Date 21DEC03 13:00
 Run Date 19DEC03 15:28

Early Bar
 Progress Bar
 Critical Activity

QSS Week 0351
 By RMG

WWC Jim Carberry x4118 Beeper 3470
 Cell 443-532-5310

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LRMG	PM LED	CRIG	START	FINISH	DEC 21	DEC 22	DEC 23	DEC 24	DEC 25	DEC 26
CM														
094	BF32756100	1200302756	INSPECT DATA PRODUCTS 300 LPM PRINTERS RIBBON	CM	10FEB04 11:59	2	23DEC03 07:00	23DEC03 08:59						
094	BF32957500	2200302957	INSPECT DATA PRODUCTS 300 LPM PRINTERS RIBBON	CM	10FEB04 11:59	2	23DEC03 07:00	23DEC03 08:59						
025	WR32691200	1200302691	SECURE SPARE COMPUTER AS REQD 72' COMP RM	M2	23JAN04 11:59	1	24DEC03 07:00*	24DEC03 07:59						
025	WR32691230	1200302691	RETURN TO SERVICE SPARE COMPUTER AS REQD 72'	M2	23JAN04 11:59	1	24DEC03 13:00	24DEC03 13:59						
CSSF														
059	P033327120	1200303327	P/O* SANDBLAST MODULES (@ FORT SMALLWOOD)	PMG		260*	19NOV03 12:00A	12JAN04 07:59						
EM1														
009	BF32382110	1200302382	14B TRAV SCREEN DRIVE MTR/CONTROL INSPECTION	EM1	25FEB04 11:59	2	22DEC03 07:00	22DEC03 08:59						
009	BF32382130	1200302382	PMT. CHECK OPERATION OF 14B TRAVELLING SCREEN	EM1	25FEB04 11:59	1	22DEC03 11:00	22DEC03 11:59						
030	BF31379010	0200301379	INSPECT TSC HVAC FILTERS	EM1	06FEB04 11:59	2	23DEC03 07:00	23DEC03 08:59						
013	HG31518010	0200301518	IMPLEMENT TA-14 OHV/FP-528 1A SPR DRN	M1		2	23DEC03 07:00	23DEC03 08:59						
070	PO23396110	1200203396	P/O. SUBMIT MATPRO WORK REQUEST FOR TRANS LIGHTS	EM1	30MAY04 11:59	1	23DEC03 07:00	23DEC03 07:59						
013	HG31518060	0200301518	CLEAR TA-14 OHV/FP-528 1A SPR DRN	M1		2	23DEC03 13:00	23DEC03 14:59						
102	KL31976062	0200301976	PERFORM TA-14 ON INTAKE FIRE DETECTION	PMG		2	23DEC03 14:00	23DEC03 15:59						
016	BF31066100	1200301066	13 250VDC BATTERY PILOT CELL VOLTS AND S.G.	EM1	03JAN04 11:59	1	24DEC03 07:00*	24DEC03 07:59						
098	BF31422230	1200301422	INSPECT U-1 MN GEN EXCITATION EQ CHECKLIST	EM1	27DEC03 11:59	3	24DEC03 07:00*	24DEC03 09:59						
002	BF31504100	1200301504	14 BATTERY WEEKLY CHECKS	EM1	01JAN04 11:59	1	24DEC03 07:00*	24DEC03 07:59						
002	STPM15011	STPM-150-1	STP-M-150-1, #12 BATTERY PILOT CELL CHECK	EM1	26DEC03 23:59	1	24DEC03 07:00*	24DEC03 07:59						
002	STPM15211	STPM-152-1	STP-M-152-1, #11 BATTERY PILOT CELL CHECK	EM1	26DEC03 23:59	1	24DEC03 08:00	24DEC03 08:59						
002	STPM15201	STPM-152-0	STP-M-152-0, RESERVE BATTERY PILOT CELL CHECK	EM1	26DEC03 23:59	1	24DEC03 09:00	24DEC03 09:59						
013	STPM19001	STPM-190-0	STP-M-190-0, FIRE PP 24V BATTERY CHECK	EM1	26DEC03 23:59	1	24DEC03 10:00	24DEC03 10:59						
EM2														
099	BF31193315	2200301193	PMT U-2 CD PRECOAT HOIST	EM2	15DEC03 11:59	1	23DEC03 07:00*	23DEC03 07:59						
060	BF32888520	2200302888	TEST CX RELAY	EM2	20DEC04 11:59	2	23DEC03 07:00	23DEC03 08:59						

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LNKMG	PM LED	STP DROP DEAD	UNIG	SIART	FINISH	21	22	23	24	25	26
EM2															
002	STPM1502W	STPM-150-2	STP-M-150-2 - #22 BATTERY PILOT CELL CHECK	EM2	24DEC03 23:59		1	23DEC03 07:00*	23DEC03 07:59						
002	STPM1522W	STPM-152-2	STP-M-152-2 - #21 BATTERY PILOT CELL CHECK	EM2	24DEC03 23:59		1	23DEC03 08:00	23DEC03 08:59						
002	BF30625010	0200300625	INSPECT SPARE BATTERY CELLS	MOV	30DEC03 11:59		1	24DEC03 07:00*	24DEC03 07:59						
EM4															
004	4KYBKROVHL	VARIOUS	RESTART PERFORM E-30 PROCEED FOR OVERHAULING 4KY	EM4			1.05*	30SEP03 10:00A	08APR04 16:59						
060	BF32888510	2200302888	INSPECT 52- 2219 (21 CEDM CLG FAN)	EM2	20DEC04 11:59		10	23DEC03 07:00	23DEC03 16:59						
EMS															
099	BF30659010	0200300659	INSPECT AUXTB/FREIGHT ELEVATORS	EMS	03JAN04 11:59		6	22DEC03 07:00	22DEC03 12:59						
FINE															
044	EK32499130	1200302499	REPLACE 1HS4488 FOR #12 SGFP SEAL WTR BSTR PP	FINE			3	22DEC03 07:00	22DEC03 09:59						
060	EK32693510	2200302693	BENCH CHECK NEW HANDSWITCH FOR 2HS5305	FINE			1	22DEC03 07:00	22DEC03 07:59						
060	EK32693540	2200302693	REPLACE 2HS5305 21 CEDM CLG FAN	FINE			3	23DEC03 07:00	23DEC03 09:59						
044	EK32499150	1200302499	PMT: VERIFY PROPER OPERATION OF 1HS4488	FINE			1	23DEC03 17:00	23DEC03 17:59						
060	EK32693560	2200302693	PMT:VERIFY PROPER OPERATION OF 2HS5305	FINE			1	23DEC03 17:00	23DEC03 17:59						
FINM															
041	HG31423110	0200301423	REBUILD SPARE CHARGING PP CARTRIDGES	M1			3	22DEC03 07:00	22DEC03 09:59						
041	EK32676110	1200302676	VERIFY PACKING TORQUE ON 1MOV269LV.	FINM			2	26DEC03 07:00	26DEC03 08:59						
041	EK32676130	1200302676	VERIFY THERE ARE NO LEAKS @ 1MOV269LV.	FINM			1	26DEC03 10:00	26DEC03 10:59						
FP															
083	VJR31352500	2200301352	OBTAIN A WBGT AT #21 & #22 MSV IF REQUIRED.	M2	16JAN04 11:59		1	26DEC03 07:00	26DEC03 07:59						
GE															
093	PO33158170	1200303158	P/O INSTALL MASONITE OVER FLOOR IN TURBINE BLDG	PMG			489*	01DEC03 07:00A	01MAR04 07:59						
093	PO33158174	1200303158	P/O IDENTIFY AND MARK LAYDOWN AREAS	PMG			489*	01DEC03 07:00A	01MAR04 07:59						
093	PO33158114	1200303158	P/O OIL MISC. TOOLING/RIGGING TRUCK TO LAYDOWN	PMG			400*	03DEC03 08:00A	22JAN04 11:59						
093	PO33158238	1200303158	P/O SET-UP MOCK-UP PIPE FOR DEMOWELDER QUAL.	PMG			240	08DEC03 07:00A	04FEB04 14:59						

NUCLEAR MEDIUM RISK

NUCLEAR MEDIUM RISK

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LRMG	STP DROP DEAD	PM LED	ORIG DUR	START	FINISH	21	22	23	24	25	26
GE	093	PO33158236	1200303158	PMG			452*	15DEC03 07:00A	08MAR04 10:59						
			PIO SET CRIBBING IN CORRECT LAYDOWN AREAS												
	093	PO33158237	1200303158	PMG			488*	15DEC03 07:00A	12MAR04 14:59						
			PIO SET UP FENCING ON TURBINE DECK FOR LPTP												
IM1	042	HG85852260	1199805852	WS1			2	22DEC03 07:00	22DEC03 08:59						
			PMT: VERIFY PROPER INDICATION & NO PROCESS												
	058	PO24096210	1200204096	IM1			4	22DEC03 07:00	22DEC03 10:59						
			P/O BENCH CHECK CHANNEL C RPS REPLACEMENT POWER												
	048	BF32035900	1200302035	IM1			6	23DEC03 07:00	23DEC03 12:59						
			STP-M-520E-1 ESFAS CVCS HIGH PRESS CALS												
	079	STPM2151U	STP-M-215-1	IM1			4	23DEC03 07:00*	23DEC03 10:59						
			STP-M-215-1, MN STM EFF RAD MON FUNCTIONAL TEST												
	048	BF32035300	1200302035	IM1			2	23DEC03 13:00	23DEC03 14:59						
			REPLACE O-RINGS AND TORQUE TRANSMITTER COVERS												
	079	BF31306201	1200301306	IM1			2	24DEC03 07:00*	24DEC03 08:59						
			REPLACE WRNGM LOW RANGE FILTERS												
	058	BF31585190	1200301585	IM1			2	24DEC03 07:00*	24DEC03 08:59						
			MEASURE AND RECORD COLD LEG TEMPERATURES IN U-1												
	045	BF32755191	1200302755	IM1			2	24DEC03 07:00*	24DEC03 08:59						
			CHECK OIL LEVEL ON SGFP OIL RESERVIOR												
	036	STPM2251E	STP-M-225-1	IM1			4	26DEC03 07:00*	26DEC03 10:59						
			STP-M-225-1, AFAS FUNCTIONAL TEST												
IM2	067	BF30311020	0200300311	IM2			4	23DEC03 07:00	23DEC03 10:59						
			REPLACE OLT2002 AS PER ES200300290-000												
	055	STPM2112V	STP-M-211-2	IM2			4	23DEC03 07:00*	23DEC03 10:59						
			STP-M-211-2, SECONDARY CEA OOS ALARM VERIF												
	079	STPM2152X	STP-M-215-2	IM2			4	23DEC03 07:00*	23DEC03 10:59						
			STP-M-215-2, MN STM EFF RAD MON FUNCTIONAL TEST												
	067	BF30311040	0200300311	IM2			2	23DEC03 13:00	23DEC03 14:59						
			PMT PROGRAM AND OPERATIONAL TEST OF OLT2002												
	079	BF31484500	2200301484	IM2			2	24DEC03 07:00*	24DEC03 08:59						
			REPLACE WRNGM LOW RANGE FILTERS												
	078	BF12748500	2200102748	IM2			1	26DEC03 07:00	26DEC03 07:59						
			BENCH TEST REPLACEMENT POWER SUPPLY												
	077	LH32902510	2200302902	OPS			3	26DEC03 07:00	26DEC03 09:59						
			INSPECT GASKET & REPLACE FILTER FOR CNTMNT												
ISD	094	BF31575100	1200301575	ISD			4	22DEC03 07:00	22DEC03 07:59						
			REMOVE THE UNIT 1 PLANT COMPUTER FROM SERVICE												
	094	BF31575200	1200301575	ISD			7	22DEC03 08:00	22DEC03 14:59						
			VERIFY BACKUP ACTIVITIES AND PERFORM MO												
	024	BF20171120	1200200171	CM			1	22DEC03 10:00	22DEC03 10:59						
			SUPPORT 1A DIESEL MRD WORKSTATION SHUTDOWN												

ISD	ACTIVITY ID	DESCRIPTION	CM	STP DROP DEAD	DUR	START	FINISH
024	BF20171140	SUPPORT OC DIESEL WRD WORKSTATION SHUTDOWN	CM		1	22DEC03 13:00	22DEC03 13:59
094	BF31523500	REMOVE THE UNIT 2 PLANT COMPUTER FROM SERVICE	ISD		1	23DEC03 07:00	23DEC03 07:59
094	BF31523510	VERIFY BACKUP ACT & PERFORM MO CLOSEOUT	ISD		7	23DEC03 08:00	23DEC03 14:59

M/CEU

024	EK31022100	PERFORM VIBRATION AND TEMPERATURE MONITORING ON	M/CEU	14JAN04 11:59	3	21DEC03 20:00	21DEC03 22:59
021	EK30441010	PERFORM VIB & TEMP MONITORING ON U1 DOM. WTR PPS	M/CEU	29DEC03 11:59	4	22DEC03 07:00	22DEC03 10:59
013	EK30460010	PERFORM VIB & TEMP MONITORING ON FIRE PPS/MTRS	M/CEU	15JAN04 11:59	8	22DEC03 07:00	22DEC03 14:59
045	EK30817500	PERFORM VIB & TEMP MONITORING ON U2 S/G FEED PP	M/CEU	14JAN04 11:59	5	22DEC03 07:00	22DEC03 11:59
045	EK30847500	PERFORM VIBRATION & TEMP MONITORING ON U2 SGFP	M/CEU	31DEC03 11:59	4	22DEC03 07:00	22DEC03 10:59
093	EK30867500	PERFORM VIB MON OF UNIT 2 MAIN TURBINE & GEN	M/CEU	29DEC03 11:59	3	22DEC03 07:00	22DEC03 09:59
047	EK30891500	PERFORM VIB & TEMP MONITORING ON U2 HTR DRN PPS	M/CEU	14JAN04 11:59	4	22DEC03 07:00	22DEC03 10:59
064	EK30913500	PERFORM VIB MONITORING ON U2 RCP'S & MTRS	M/CEU	22DEC03 11:59	6	22DEC03 07:00	22DEC03 12:59
098	EK30976100	PERFORM VIB & TEMP. MONITOR ON U1 SLC PP	M/CEU	29DEC03 11:59	4	22DEC03 07:00	22DEC03 10:59
043	EK30989100	PERFORM VIBRATION MONITORING OF U-1 CAR PUMPS	M/CEU	16JAN04 11:59	8	22DEC03 07:00	22DEC03 14:59
093	EK31001100	PERFORM VIB MON ON UNIT 1 MAIN TURBINE & GEN	M/CEU	29DEC03 11:59	8	22DEC03 07:00	22DEC03 14:59
064	EK31051100	PERFORM VIB MONITORING ON UNIT 1 RCP'S	M/CEU	23DEC03 11:59	6	22DEC03 07:00	22DEC03 12:59
030	EK31413010	PERF VIB & TEMP MONITORING OF 11 CRHVAC FAN/MTR	M/CEU	29DEC03 11:59	2	22DEC03 07:00	22DEC03 08:59
042	EK32966500	PERFORM VIB & TEMP MONITORING ON 21 CWP	M/CEU	14JAN04 11:59	8	22DEC03 07:00	22DEC03 14:59
032	EK33402100	PERFORM VIB & TEMP MONITORING ON U1 ECCS EXH FAN	M/CEU	29DEC03 11:59	6	22DEC03 07:00	22DEC03 12:59
030	EK31413020	PERF VIB & TEMP MONITORING OF 12 CRHVAC FAN/MTR	M/CEU	29DEC03 11:59	2	22DEC03 09:00	22DEC03 10:59
098	EK31694100	PERFORM THERMOGRAPHY ON UNIT 1 ISOPHASE BUS	M/CEU	11JAN04 11:59	8	23DEC03 07:00	23DEC03 14:59
098	EK32966500	PERFORM THERMOGRAPHY ON UNIT 2 ISOPHASE BUS	M/CEU	11JAN04 11:59	8	23DEC03 07:00	23DEC03 14:59
045	HG30273150	PERFORM VIBRATION ANALYSIS ON #12 SGFP SEAL	M1		1	26DEC03 07:00	26DEC03 07:59

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LRMG	PM LED STP DROP DEAD	ORIG DUR	START	FINISH	DEC
M1	045	EK24970120	1200204970	REPLACE #12 S/G COND. BOOSTER PUMP/OLLER W/ NEW	FINM		4	22DEC03 07:00	22DEC03 10:59
M1	045	HG30273120	1200300273	OVERHAUL #12 SGFP SEAL WATER BOOSTER PP	M1		16	22DEC03 07:00	23DEC03 14:59
M1	042	HG31073210	1200301073	CHANGE OIL #13 A&B NORTH/SOUTH AMERTAP PUMPS.	M1		2	22DEC03 07:00	22DEC03 08:59
M1	045	HG31339220	1200301339	SAMPLE OIL #12 SGFP SEAL WATER BOOSTER PUMP	M1		1	22DEC03 07:00	22DEC03 07:59
M1	053	HG31380200	0200301380	INSPECT THE SUMP PUMPS IN RWT SUMPS AND S EAST	M1		4	22DEC03 07:00	22DEC03 10:59
M1	042	HG31073220	1200301073	PMT VERIFY OIL LEVEL / CHECK FOR LEAKAGE	M1		1	22DEC03 09:00	22DEC03 09:59
M1	042	HG24722220	1200204722	REPLACE 1MOV2450VLV.	M1		5	22DEC03 11:00	23DEC03 07:59
M1	042	HG31596100	1200301596	SAMPLE OIL #11 THRU #16 CIRC WTR PP MOTOR	M1		4	23DEC03 07:00	23DEC03 10:59
M1	042	HG24722250	1200204722	PMT. VERIFY THAT 1MOV2450VLV OPERATES PROPERLY	M1		1	23DEC03 14:00	23DEC03 14:59
M1	045	EK24970150	1200204970	PMT. VERIFY PROPER OIL LEVEL ON #12 S/G COND.	FINM		1	23DEC03 17:00	23DEC03 17:59
M1	045	HG30273140	1200300273	PERFORM PMT. LEAK / OPERATIONAL CHECK.	M1		1	23DEC03 17:00	23DEC03 17:59
M1	045	HG31339240	1200301339	PMT. VERIFY OIL LEVEL / NO LEAKS #12 SGFP SEAL	M1		1	23DEC03 17:00	23DEC03 17:59
M1	083	HG31151200	1200301151	OBTAIN FYROUDEL OIL SAMPLE 11 AND 12 MSVS	M1		1	26DEC03 07:00	26DEC03 07:59
M1	041	HG31333210	1200301333	SAMPLE OIL #11 CHARGING PUMP CRANKCASE & GEAR	M1		2	26DEC03 07:00	26DEC03 08:59
M1	083	HG31151210	1200301151	PMT. VERIFY NO LEAKS/VERIFY OIL LEVEL	M1		1	26DEC03 08:00	26DEC03 08:59
M1	041	HG31333220	1200301333	PMT/ENSURE OIL LEVELS SAT., NO OIL LEAKAGE	M1		1	26DEC03 09:00	26DEC03 09:59
M2	043	WR33752540	2200303752	REPLACE I.B. & O.B. PP BEARINGS 21 CAR PP	M2		40	15OCT03 14:00A	31DEC03 14:59
M2	042	WR12943520	2200102943	REPLACE 23B AMERTAP DISTRIBUTORS.	M2		79	15DEC03 07:00A	30DEC03 13:59
M2	032	WR31262500	2200301262	INSPECT FILTERS 21/22 AUX. WASTE PROCESSING	M2		2	22DEC03 07:00	22DEC03 08:59
M2	032	WR31447200	1200301447	INSPECT FILTERS/BELT U-1 AFW PP RM AC UNIT	M2		2	22DEC03 07:00	22DEC03 08:59
M2	032	WR31447210	1200301447	PMT. VISUAL INSPECT BELT U-1 AFW PP RM AC UNIT	M2		1	22DEC03 09:00	22DEC03 09:59
M2	013	HG31518030	0200301518	REPLACE 0HVFP-528 1A SPR DRN	M1		4	23DEC03 09:00	23DEC03 12:59

ACTIVITY ID	WU #	DESCRIPTION	CLASS	STP DROP DEAD	DUR	START	FINISH	DEC
M2								
013	HG31518050	PMT. LEAK CHECK OHV/FP-528 1A SPR DRN	M1		1	23DEC03 15:00	23DEC03 15:59	█
025	WR32897500	REPLACE #12 72' COMP RM AC UNIT HUMIDIFIER	M2		4	24DEC03 07:00*	24DEC03 10:59	█
025	WR32691210	REPLACE #1 72' COMP RM AC UNIT HUMIDIFIER	M2		4	24DEC03 08:00	24DEC03 11:59	█
025	WR32897510	PMT. LEAK CHECK #12 72' COMP RM AC UNIT	M2		1	24DEC03 11:00	24DEC03 11:59	█
025	WR32691220	PMT. LEAK CHECK #11 72' COMP RM AC UNIT	M2		1	24DEC03 12:00	24DEC03 12:59	█
032	WR31158210	INSPECT FILTERS, LOUVERS #11 SWGR ROOM SUPPLY	M2		2	26DEC03 07:00	26DEC03 08:59	█
083	WR31352510	INSPECT #21 AND #22 MSIV OPERATORS FOR AIR	M2		6	26DEC03 08:00	26DEC03 13:59	█
MATP								
032	WR30109010	TRANSPORT / SUPPORT CHARCOAL REMOVAL FROM OLD	M2		40	26DEC03 07:00	02JAN04 14:59	█
MC								
072	WR30636010	PERFORM PM ON EASTWEST AERATOR ROTOR SEWAGE	MC		3	22DEC03 07:00	22DEC03 09:59	█
009	WR31122200	#11A THRU #16B TRAVELING SCREEN PM.	MC		8	22DEC03 07:00	22DEC03 14:59	█
009	WR31426200	#11A TRAVELING SCREEN MAIN AXLE LUBRICATION.	MC		4	22DEC03 07:00	22DEC03 10:59	█
072	WR30636020	PMT: ON EASTWEST AERATOR ROTOR SEWAGE	MC		1	22DEC03 10:00	22DEC03 10:59	█
102	KL31976050	P/O "" CONTINGENT "" CAP OFF SEWAGE LINE	PMG		4	23DEC03 07:00	23DEC03 10:59	█
009	WR31280500	#21A THRU #26B TRAVELING SCREEN PM.	MC		8	23DEC03 07:00	23DEC03 14:59	█
009	WR31378200	LUBRICATE #11B TRAVELING SCREEN PER	MC		4	23DEC03 07:00	23DEC03 10:59	█
102	WR13224510	ERECT SCAFFS TO REPL EXP JT U-II 5/27' EASTPEN	MC		8	26DEC03 07:00	26DEC03 14:59	█
MMC								
030	LH33091500	(B) SCAFFOLD 27' SWGR CONDUIT 2A20312A0703.	CATE		5	22DEC03 12:00*	23DEC03 08:59	█
046	BF326886100	(B) WKG SCAFFOLD TO 1MOV1527OP.	MOV		5	26DEC03 07:00	26DEC03 11:59	█
046	PO30350100	P/O (B) SCAFF TO GB1 PPG.	BNI		30	26DEC03 09:00	31DEC03 14:59	█
MMR								
099	BF31193520	(R) WKG SCAFFOLD U-2 CPF MONORAIL BUS BARS.	EM2		6	22DEC03 07:00*	22DEC03 12:59	█
NUCLEAR MEDIUM RISK								

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LRMG	PM LED	STP DROP DEAD	ORIG DUR	START	FINISH	DEC 21	DEC 22	DEC 23	DEC 24	DEC 25	DEC 26
MOV	047	BF30517110	1200300517	PERFORM PM ON 1MOV3723 AND FDR BKR	MOV	05JUL04 11:59	6	22DEC03 07:00	22DEC03 12:59						
	042	HG24722210	1200204722	DISC. AND REMOVE 1MOV2450 TO ALLOW REPLACEMENT.	M1		4	22DEC03 07:00	22DEC03 10:59						
	047	BF30517120	1200300517	PMT: FUNCTIONAL TEST ON 1MOV3723	MOV	05JUL04 11:59	1	22DEC03 13:00	22DEC03 13:59						
	047	BF22110110	1200202110	PM ON 1MOV37280P	MOV	02JAN04 11:59	4	23DEC03 07:00	23DEC03 10:59						
	041	BF32447110	1200302447	1MOV5090P. PM IAW MOV-12.	MOV	31MAY04 11:59	4	23DEC03 07:00	23DEC03 10:59						
	058	STPM2002W	STPM-200-2	STP-M-200-2, RX TRIP BREAKER FUNCTIONAL TEST	EM2	03JAN04 23:59	4	23DEC03 07:00*	23DEC03 10:59						
	042	HG24722230	1200204722	REINSTALL AND RECONNECT 1MOV2450.	M1		4	23DEC03 08:00	23DEC03 11:59						
	047	BF22110130	1200202110	PMT: FUNCTIONAL TEST OF 1MOV37280P	MOV	02JAN04 11:59	2	23DEC03 13:00	23DEC03 14:59						
	041	BF32447150	1200302447	1MOV5090P. PMT IAW MOV-12.	MOV	31MAY04 11:59	1	23DEC03 13:00	23DEC03 13:59						
	042	HG24722260	1200204722	PMT: VERIFY PROPER OPERATIONS OF 1MOV2450V/LV.	M1		2	23DEC03 14:00	23DEC03 15:59						
MP	055	LH04416100	1200004416	12 MG SET: PREP & PRIME	MP		4	22DEC03 07:00	22DEC03 10:59						
	042	HG8852290	1199805852	13 WBP PP: ALLOW 24 HR CURE TIME	WS1		24	22DEC03 09:00	23DEC03 08:59						
	055	LH04416110	1200004416	12 MG SET: ALLOW 1 HR PRIMER CURE TIME	MP		1	22DEC03 11:00	22DEC03 11:59						
	055	LH04416120	1200004416	12 MG SET: APPLY TOP COAT	MP		3	22DEC03 12:00	22DEC03 14:59						
	042	HG8852295	1199805852	13 WBP PP: APPLY TOP COAT	WS1		3	23DEC03 09:00	23DEC03 11:59						
NDE	083	PO14690120	1200104690	P/O-1DR-17:PERFORM SHOP V/WELD INSPECT.	WS1		4	26DEC03 04:00	26DEC03 07:59						
OPS	052	RO1RWT	RWT	DRAIN U-1 RWT TO WASTE	OPS		1,4,40	09DEC03 14:00A	18FEB04 07:59						
	052	RO2RWT	RWT	PERFORM BLENDED M/U TO RWT PER OI-2B	OPS		1,4,40	09DEC03 14:00A	16FEB04 12:59						
	052	RO3RWT	RWT	PERFORM BORIC ACID BATCH ADDS TO U-1 BASTS	OPS		1,4,40	09DEC03 14:00A	16FEB04 12:59						
	006	LH33908100	2200303908	STP-O-090-2, AC SOURCES & ONSITE PWR DISTRIB	OPS		1	21DEC03 19:00*	21DEC03 19:59						
	006	LH33932100	1200303932	STP-O-090-1, AC SOURCES & ONSITE PWR DISTRIB	OPS		1	21DEC03 19:00*	21DEC03 19:59						

OPS	ACTIVITY ID	WU #	DESCRIPTION	STATUS	STP DROP DEAD	DUR	START	END	12.18.0	22	23	24	25	26
077	PE007720WY	PE00077	PE-0-077-02-O-W UPDATE CR RMS IND BKGD LVL5	OPS		1	21DEC03 19:00*	21DEC03 19:59						
026	PE102610WY	PE01026	PE-1-026-01-O-W U-1 CONT RM ANNUNC/RCDR CHECKS	OPS		1	21DEC03 19:00*	21DEC03 19:59						
026	PE102640WY	PE01026	PE-1-026-04-O-W U-1 LOCAL ANNUNC/RCDR CHECKS	OPS		1	21DEC03 19:00	21DEC03 19:59						
041	PE141080WY	PE01041	PE-1-041-08-O-W RECORD 11 BAST LVL IND PER OI-2C	OPS		1	21DEC03 19:00*	21DEC03 19:59						
041	PE141090WY	PE01041	PE-1-041-09-O-W RECORD 12 BAST LVL IND PER OI-2C	OPS		1	21DEC03 19:00	21DEC03 19:59						
041	PE141100WY	PE01041	PE-1-041-10-O-W CHECK U-1 RCMU PP FILTER D/P	OPS		1	21DEC03 19:00	21DEC03 19:59						
093	PE193230WY	PE01093	PE-1-093-23-O-W CHK EHC PWR UNIT DRYER DESSICANT	OPS		1	21DEC03 19:00*	21DEC03 19:59						
026	PE202610WY	PE02026	PE-2-026-01-O-W U-2 CONT RM ANNUNC/RCDR CHECKS	OPS		1	21DEC03 19:00	21DEC03 19:59						
026	PE202640WY	PE02026	PE-2-026-04-O-W U-2 LOCAL ANNUNC/RCDR CHECKS	OPS		1	21DEC03 19:00	21DEC03 19:59						
041	PE241080WY	PE02041	PE-2-041-08-O-W RECORD 21 BAST LVL IND PER OI-2C	OPS		1	21DEC03 19:00	21DEC03 19:59						
041	PE241090WY	PE02041	PE-2-041-09-O-W RECORD 22 BAST LVL IND PER OI-2C	OPS		1	21DEC03 19:00	21DEC03 19:59						
041	PE241100WY	PE02041	PE-2-041-10-O-W CHECK U-2 RCMU PP FILTER D/P	OPS		1	21DEC03 19:00	21DEC03 19:59						
093	PE293340WY	PE02093	PE-2-093-34-O-W CHK/DRN EHC OIL COLLECTION TRAYS	OPS		1	21DEC03 19:00	21DEC03 19:59						
024	STP0008A1U	STP0-008A1	PERFORM MONTHLY AND QUARTERLY SR STP-O-008A-1	OPS	31DEC03 23:59	4	21DEC03 20:00*	21DEC03 23:59						
024	EK31022110	1200301022	PMOT: NO OPS TEST REQUIRED	M/CEU	14JAN04 14:59	1	21DEC03 23:00	21DEC03 23:59						
042	HG24722201	1200204722	COLLECT BALLS AND SEC 13B AMERTAP	M1		1	22DEC03 04:00	22DEC03 04:59						
045	EK24970100	1200204970	REMOVE 12 SGFP SEAL WTR.BSTR.PP FROM SERVICE	FINM		1	22DEC03 05:00	22DEC03 05:59						
045	HG30273100	1200300273	ENSURE 11 SGFP SEAL WTR BSTR PP IN SERVICE	M1		1	22DEC03 05:00	22DEC03 05:59						
042	HG31073200	1200301073	SECURE #13 A&B NORTH/SOUTH AMERTAP PUMPS AS	M1	09JAN04 14:59	2	22DEC03 05:00	22DEC03 06:59						
045	HG31339210	1200301339	SHIFT TO #11 SGFP SEAL WATER BOOSTER PUMP TO	M1	16JAN04 14:59	2	22DEC03 05:00	22DEC03 05:59						
024	BF20171100	1200200171	IMPLEMENT 1AOC DG LOGS WITH MDR OOS.	CM		1	22DEC03 07:00	22DEC03 07:59						
042	HG88852245	1199805852	PLACE 13 WBP PP IN LEAD FOR SHOP PMTS	WS1		1	22DEC03 07:00*	22DEC03 07:59						

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LRMG	PM LED	ORIG	START	FINISH
OPS								
013	STPF07602	STPF-076-0	TAKE FIRE PUMP VIBRATION READINGS QUARTERLY	FP		1	22DEC03 07:00	22DEC03 07:59
013	STPF07602	STPF-076-0	STPF-076-0, STAGGERED TEST OF ELECTRICAL FIRE	FP	01JAN04 23:59	1	22DEC03 07:00*	22DEC03 07:59
042	HG31073230	1200301073	RETURN #13 A&B AMERTAPS TO SERVICE	M1	09JAN04 11:59	1	22DEC03 10:00	22DEC03 10:59
071	JCMMMTDIS		DISCHARGE MISC. WASTE MONITOR TANK @ <1mCi	OPS		4	22DEC03 10:00*	22DEC03 13:59
045	EK30847510	2200300847	PMOT: NO OPS TEST REQUIRED	MCEU	31DEC03 11:59	1	22DEC03 11:00	22DEC03 11:59
013	EK30460020	0200300460	PMOT: NO OPS TEST REQUIRED	MCEU	15JAN04 11:59	1	22DEC03 15:00	22DEC03 15:59
043	EK30989110	1200300989	PMOT: NO OPS TEST REQUIRED.	MCEU	16JAN04 11:59	1	22DEC03 15:00	22DEC03 15:59
042	EK32965510	2200302965	PMOT: NO OPS TEST REQUIRED	MCEU	14JAN04 11:59	1	22DEC03 15:00	22DEC03 15:59
002	PE000230WT	PEO0002	PE-0-002-03-O-W VERIFY OPER 125VDC GND LK DETECT	OPS		1	22DEC03 19:00*	22DEC03 19:59
013	PE001330WX	PEO0013	PE-0-013-03-O-W INSP SR AREA-SA-1-100, ATT #1	OPS		1	22DEC03 19:00*	22DEC03 19:59
102	PE010257ML	PEO0102	PE-0-102-57-O-M REVIEW PC TEMP CONFIG CHANGE LOG	OPS		1	22DEC03 19:00*	22DEC03 19:59
012	PE101210WZ	PEO1012	PE-1-012-01-O-W ROTATE IDLE U-1 SW PPS PER OI-29	OPS		1	22DEC03 19:00*	22DEC03 19:59
013	PE101340WX	PEO1013	PE-1-013-04-O-W INSP U-1 SR RCA AREA-SA-1-100	OPS		1	22DEC03 19:00	22DEC03 19:59
013	PE101350WX	PEO1013	PE-1-013-05-O-W INSP U-1 SR NONRCA AREA-SA-1-100	OPS		1	22DEC03 19:00	22DEC03 19:59
019	PE101980WV	PEO1019	PE-1-019-08-O-W B/D MOIST FROM U-1 IA & PA RCVRS	OPS		1	22DEC03 19:00*	22DEC03 19:59
042	PE104260WZ	PEO1042	PE-1-042-06-O-W CHK U-1 WBP SYS COMP PER OI-14B	OPS		1	22DEC03 19:00*	22DEC03 19:59
055	PE105540WV	PEO1055	PE-1-055-04-O-W CHK U-1 CEDM COIL PWR PROG CABS	OPS		1	22DEC03 19:00*	22DEC03 19:59
094	PE109420WV	PEO1094	PE-1-094-02-O-W AUDIT COMP DEL& ALARM LIMITS LOG	OPS		1	22DEC03 19:00*	22DEC03 19:59
093	PE193390WV	PEO1093	PE-1-093-39-O-W PERF MAIN TURB SHAFT VOLT TEST	OPS		1	22DEC03 19:00*	22DEC03 19:59
013	PE201340WX	PEO2013	PE-2-013-04-O-W INSP U-2 SR RCA - PER SA-1-100	OPS		1	22DEC03 19:00	22DEC03 19:59
013	PE201350WX	PEO2013	PE-2-013-05-O-W INSP U-2 SR NONRCA -PER SA-1-100	OPS		1	22DEC03 19:00	22DEC03 19:59
019	PE201980WV	PEO2019	PE-2-019-08-O-W B/D MOIST FROM U-2 IA & PA RCVRS	OPS		1	22DEC03 19:00	22DEC03 19:59

ENVIRONMENTAL MEDIUM RISK

OPS	ACTIVITY ID	WIP #	DESCRIPTION	STATUS	STP DROP DEAD	DUR	START	FINISH	12.18	0.6	12.18	0.6	12.18	0.6	12.18	0.6	12.18	0.6	12.18	0.6
042	PE204260WZ	PEO2042	PE-2-042-06-O-W CHK U-2 WBP SYS COMP PER OI-14B	OPS		1	22DEC03 19:00	22DEC03 19:59												
055	PE205554OWY	PEO2055	PE-2-055-04-O-W CHK U-2 CEDM COIL PWR PROG CABS	OPS		1	22DEC03 19:00	22DEC03 19:59												
094	PE209420OWY	PEO2094	PE-2-094-02-O-W AUDIT COMP DEL&LARM LIMITS LOG	OPS		1	22DEC03 19:00	22DEC03 19:59												
060	BF32888500	2200302888	ENSURE 22 CEDM CLG FAN INSERVICE FOR MAINT ON 21	EM2		2	23DEC03 05:00	23DEC03 06:59												
060	EK32693520	2200302693	ENSURE 21 CEDM FAN SECURED FOR HS REPLACEMENT	FINE		1	23DEC03 05:00	23DEC03 05:59												
041	BF32447130	1200302447	IF CHG IS IN OPERATION, ENSURE NORMAL VCT	MOV		1	23DEC03 12:00	23DEC03 12:59												
041	BF32447140	1200302447	PERF A FUNCTIONAL STROKE ON 1MOV509 FOR SHOP PMT	MOV		1	23DEC03 13:00	23DEC03 13:59												
067	BF30311050	0200300311	PMT: CH CHK OLLA2002 PER STP-O-87	IM2		1	23DEC03 15:00	23DEC03 15:59												
042	HG24722270	1200204722	RESTORE 13B AMERTAP TO SERVICE	M1		1	23DEC03 16:00	23DEC03 16:59												
045	EK24970140	1200204970	PMT:PERF. 15 MIN TEST RUN 12SGFP SLWTR BSTRPP	FINM		1	23DEC03 17:00	23DEC03 17:59												
044	EK32499160	1200302499	RUN #12 SGFP SEAL WTR BSTR PP FOR SHOP PMT	FINE		1	23DEC03 17:00	23DEC03 17:59												
045	HG30273135	1200300273	RUN 12 SGFP SEAL WTR BSTR PP FOR SHOP PMT	M1		1	23DEC03 17:00	23DEC03 17:59												
045	HG313339230	1200301339	SHIFT TO #12 SGFP SEAL WATER BOOSTER PUMP IN	M1		1	23DEC03 17:00	23DEC03 17:59												
060	EK32693570	2200302693	SUPPORT SHOP PMT--OPERATE 2HSS306	FINE		1	23DEC03 18:00	23DEC03 18:59												
027	PE002710WY	PEO0027	PE-0-027-01-O-W RUN 11/12 AUX BLRS PER OI-33	OPS		1	23DEC03 19:00*	23DEC03 19:59												
027	PE002760WY	PEO0027	PE-0-027-06-O-W U-1 AFW BLRS LO LVL TRIP-OI-33	OPS		1	23DEC03 19:00	23DEC03 19:59												
036	PE103640WMM	PEO1036	PE-1-036-04-O-W U-1 AFW HDR TEMP/PRESS READINGS	OPS		1	23DEC03 19:00*	23DEC03 19:59												
102	PE110257WZ	PEO1102	PE-1-102-57-O-W PERF U1 RWT RM/MI RAD AREA TOURS	OPS		1	23DEC03 19:00*	23DEC03 19:59												
012	PE112160WZ	PEO1012	PE-1-012-16-O-W VERIF N2 BOTTLE PRESS 1CV5149	OPS		1	23DEC03 19:00*	23DEC03 19:59												
036	PE203640WMM	PEO2036	PE-2-036-04-O-W U-2 AFW HDR TEMP/PRESS READINGS	OPS		1	23DEC03 19:00	23DEC03 19:59												
102	PE210257WZ	PEO2102	PE-2-102-57-O-W PERF U1 RWT RM/MI RAD AREA TOURS	OPS		1	23DEC03 19:00	23DEC03 19:59												
012	PE212010WZ	PEO2012	PE-2-012-01-O-W ROTATE IDLE U-2 SW PPS PER OI-29	OPS		1	23DEC03 19:00	23DEC03 19:59												

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LRMG	PM LED STP DROP DEAD	ORIG DUR	START	FINISH	DEC 21	DEC 22	DEC 23	DEC 24	DEC 25	DEC 26
012	PE21216QWZ	PEO2012	PE-2-012-16-O-W VERIF N2 BOTTLE PRESS 2CV5149	OPS		1	23DEC03 19:00	23DEC03 19:59						
058	BF31585180	1200301585	RCS TCOLD > 530 DEG-F	IM1	02JAN04 11:59	1	24DEC03 06:00*	24DEC03 06:59						
071	JCWGMTDIS		DISCHARGE 12 RC WASTE MONITOR TANK @ 1.5mCi	OPS		12	24DEC03 10:00*	24DEC03 21:59						
053	PE00532QWZ	PEO0053	PE-0-053-02-O-W CHK TENDON BUTRESS&OUTSIDE SLMPS	OPS		4	24DEC03 19:00*	24DEC03 22:59						
011	PE10112QWZ	PEO1011	PE-1-011-02-O-W PERF U-1 SRW SYS LK RT PER OI-15	OPS		1	24DEC03 19:00*	24DEC03 19:59						
012	PE10126QWA	PEO1012	PE-1-012-06-O-W PERF U-1 SW FLOW VERIF PER OI-29	OPS		1	24DEC03 19:00*	24DEC03 19:59						
041	PE10415QWZ	PEO1041	PE-1-041-05-O-W ROTATE 11 & 12 RCMU PPS OI-2B	OPS		1	24DEC03 19:00*	24DEC03 19:59						
047	PE10471QWZ	PEO1047	PE-1-047-01-O-W SWAP OPER OIL PPS FOR 11/12 HDPs	OPS		1	24DEC03 19:00*	24DEC03 19:59						
098	PE10981QWZ	PEO1098	PE-1-098-01-O-W TEST STANDBY SLC PP PER OI-10C	OPS		1	24DEC03 19:00*	24DEC03 19:59						
098	PE10982QWZ	PEO1098	PE-1-098-02-O-W TEST EMER SEAL OIL PP PER OI-10A	OPS		1	24DEC03 19:00	24DEC03 19:59						
043	PE143102WA	PEO1043	PE-1-043-01-O-2W TEST U-1 CAR UNITS PER OI-13	OPS		1	24DEC03 19:00*	24DEC03 19:59						
011	PE20112QWZ	PEO2011	PE-2-011-02-O-W PERF U-2 SRW SYS LK RT PER OI-15	OPS		1	24DEC03 19:00	24DEC03 19:59						
012	PE20126QWA	PEO2012	PE-2-012-06-O-W PERF U-2 SW FLOW VERIF PER OI-29	OPS		1	24DEC03 19:00	24DEC03 19:59						
041	PE20415QWZ	PEO2041	PE-2-041-05-O-W ROTATE 21 & 22 RCMU PPS - OI-2B	OPS		1	24DEC03 19:00	24DEC03 19:59						
044	PE20441QML	PEO2044	PE-2-044-01-O-M ROTATE IDLE U-2 COND PUMP-OI-11A	OPS		1	24DEC03 19:00*	24DEC03 19:59						
047	PE20471QWZ	PEO2047	PE-2-047-01-O-W SWAP OPER OIL PPS FOR 21/22 HDPs	OPS		1	24DEC03 19:00	24DEC03 19:59						
098	PE20982QWZ	PEO2098	PE-2-098-02-O-W TEST AIR SIDE EMER SEAL OIL PP	OPS		1	24DEC03 19:00	24DEC03 19:59						
043	PE243102WA	PEO2043	PE-2-043-01-O-2W TEST U-2 CAR UNITS PER OI-13	OPS		1	24DEC03 19:00	24DEC03 19:59						
044	PE20443QML	PEO2044	PE-2-044-03-O-M ROTATE IDLE U-2 COND BSTR PUMP	OPS		1	24DEC03 20:00	24DEC03 20:59						
013	PE00134QWA	PEO0013	PE-0-013-04-O-W WEEKLY RUN OF BREATHING AIR COMP	OPS		1	25DEC03 19:00*	25DEC03 19:59						
013	PE00136QWA	PEO0013	PE-0-013-06-O-W INSP FIRE TRUCK & ASSOC EQUIP	OPS		1	25DEC03 19:00	25DEC03 19:59						
041	PE10413QWZ	PEO1041	PE-1-041-03-O-W ROTATE IDLE U-1 CHG PPS-OI-2A	OPS		1	25DEC03 19:00*	25DEC03 19:59						

ENVIRONMENTAL MEDIUM RISK

OPS	ACTIVITY ID	IMP#	DESCRIPTION	TIME	STP DROP DEAD	DUR	START	ENDD	ENVIRONMENTAL RISK
041	PE104170WZ	PEO1041	PE-1041-07-O-W MONITOR PERF U-1 CVCS PURIF SYS	OPS		1	25DEC03 19:00	25DEC03 19:59	INDUSTRIAL MEDIUM RISK
102	PE110260WZ	PEO1102	PE-1-102-06-O-W CHK ACCUM CHARCOL FILT RUN TIMES	OPS		1	25DEC03 19:00*	25DEC03 19:59	INDUSTRIAL MEDIUM RISK
041	PE204130WZ	PEO2041	PE-2-041-03-O-W ROTAT IDLE U-2 CHG PPS PER OI-2A	OPS		1	25DEC03 19:00	25DEC03 19:59	INDUSTRIAL MEDIUM RISK
041	PE204170WZ	PEO2041	PE-2-041-07-O-W MONTR PERF OF U-2 CVCS PURIF SYS	OPS		1	25DEC03 19:00	25DEC03 19:59	INDUSTRIAL MEDIUM RISK
102	PE210260WZ	PEO2102	PE-2-102-06-O-W CHK ACCUM CHARCOL FILT RUN TIMES	OPS		1	25DEC03 19:00	25DEC03 19:59	INDUSTRIAL MEDIUM RISK
041	STPO0871G	STPO-087-1	STP-O-087-1, BORATED WATER SOURCE OPS	OPS		2	25DEC03 19:00*	25DEC03 20:59	INDUSTRIAL MEDIUM RISK
041	STPO0872Z	STPO-087-2	STP-O-087-2, BORATED WATER SOURCE OPS	OPS		2	25DEC03 19:00*	25DEC03 20:59	INDUSTRIAL MEDIUM RISK
041	HG31333200	1200301333	SECURE #11 CHARGING PUMP TO SUPPORT OIL SAMPLE	M1		2	26DEC03 05:00	26DEC03 06:59	INDUSTRIAL MEDIUM RISK
032	WR31158200	1200301158	PLACE #11 SWGR IN SERVICE TO SUPPORT PM	M2		2	26DEC03 05:00	26DEC03 06:59	INDUSTRIAL MEDIUM RISK
077	LH32902500	2200302902	BYPASS U-2 CNTMT RMS PART 2RES280 FLTR RPLC.	OPS		1	26DEC03 06:00*	26DEC03 06:59	INDUSTRIAL MEDIUM RISK
041	EK32676120	1200302676	WORK WITH MAINT. TO CYCLE 1MOV269V.V.	FINM		1	26DEC03 09:00	26DEC03 09:59	INDUSTRIAL MEDIUM RISK
032	WR31158220	1200301158	OPERATE LOUVERS #11 SWGR SUP	M2		1	26DEC03 09:00	26DEC03 09:59	INDUSTRIAL MEDIUM RISK
077	LH32902520	2200302902	PMT:RTN 2RIS280 TO SERV AND PERF STP-O-33-2	OPS		1	26DEC03 10:00	26DEC03 10:59	INDUSTRIAL MEDIUM RISK
041	EK32676140	1200302676	PMT: TEST STROKE 1MOV269 PER STP-O-65A-1	FINM		1	26DEC03 11:00	26DEC03 11:59	INDUSTRIAL MEDIUM RISK
PMG									
102	RCSGTDEM0B	PAPERLESS	SHIP RADIOACTIVE WASTE FOR PROCESSING & DISPOSAL	PMG		1,343*	02JUN03 07:00A	30JAN04 13:59	INDUSTRIAL MEDIUM RISK
SCH									
102	WR13224500	2200103224	THIS JOB REQS SHELF LIFE MATL WORK AS SCHEDULED	MC		1	26DEC03 07:00	26DEC03 07:59	INDUSTRIAL MEDIUM RISK
SGEM									
097	BF30522110	1200300522	THERMOGRAHY 1L14/1X22	SGEM		5	22DEC03 07:00	22DEC03 11:59	INDUSTRIAL MEDIUM RISK
097	BF30522120	1200300522	THERMOGRAHY 1L15/1X23	SGEM		5	22DEC03 12:00	23DEC03 08:59	INDUSTRIAL MEDIUM RISK
063	LH30694010	0200300694	PERFORM MONTHLY CATHODIC PROTECTION PM PER	SGEM		5	23DEC03 07:00	23DEC03 11:59	INDUSTRIAL MEDIUM RISK
097	BF30522130	1200300522	THERMOGRAHY 1L16	SGEM		5	23DEC03 09:00	23DEC03 13:59	INDUSTRIAL MEDIUM RISK
097	BF30522140	1200300522	THERMOGRAHY 1L30/1X37	SGEM		5	23DEC03 14:00	26DEC03 10:59	INDUSTRIAL MEDIUM RISK

SYS	ACTIVITY ID	MO #	ACTIVITY DESCRIPTION	LRMG	PM LED STP DRP DEAD	ORIG DUR	START	FINISH							
036	PO13146200	1200103146	P/O REWORK CONDUITS TO SUPPORT 1043C REMOVAL	PMG		50	26DEC03 07:00*	05JAN04 16:59							

TAG

047	BF30517100	1200300517	TAG OUT: 1MOV3723 : LUBE/INSP MOV-12	MOV	05JUL04 11:59	2	22DEC03 05:00	22DEC03 06:59							
009	BF32382100	1200302382	TAGOUT 14B TRAV SCREEN FOR PM	EM1	25FEB04 11:59	2	22DEC03 05:00	22DEC03 06:59							
045	EK24970110	1200204970	TAG OUT: 12SGFP SL.WTR.BSTRPP.RPLC TRICO OILER	FINM		2	22DEC03 05:00	22DEC03 06:59							
044	EK32499120	1200302499	TAGOUT #12 SGFP SEAL WTR BSTR PP, 1HS4488	FINE		2	22DEC03 05:00	22DEC03 06:59							
042	HG24722205	1200204722	ISOLATE 1MOV2450VLV. TO ALLOW REPLACEMENT	M1		2	22DEC03 05:00	22DEC03 06:59							
045	HG30273110	1200300273	TAG OUT #12 SGFP SEAL WATER BOOSTER PP FOR	M1		2	22DEC03 05:00	22DEC03 06:59							
009	BF32382120	1200302382	CLEAR TAGOUT ON 14B TRAV SCREEN	EM1	25FEB04 11:59	2	22DEC03 09:00	22DEC03 10:59							
047	BF30517130	1200300517	CLEAR TAG OUT: 1MOV3723:LUBE/INSP MOV-12	MOV	05JUL04 11:59	2	22DEC03 14:00	22DEC03 15:59							
047	BF22110100	1200202110	TAGOUT 1MOV3728OP FOR PM	MOV	02JAN04 11:59	2	23DEC03 05:00	23DEC03 06:59							
067	BF30311010	0200300311	TAGOUT 0LT2002 - SFP LEVEL	IM2		2	23DEC03 05:00	23DEC03 06:59							
041	BF32447100	1200302447	DEENERGIZE AND TAG SHUT 1-CVC-509-MOV	MOV	31MAY04 11:59	2	23DEC03 05:00	23DEC03 06:59							
060	EK32693530	2200302693	TAGOUT 21 CEDM CLG FAN FOR 2HS5305 REPLACEMENT	FINE		2	23DEC03 05:00	23DEC03 06:59							
013	HG31518020	0200301518	TAG OUT 0HVFP-528 1A SPR DRN	M1		2	23DEC03 05:00	23DEC03 06:59							
060	EK32693550	2200302693	CLEAR TAGOUT FOR 21 CEDM CLG FAN H/S	FINE		2	23DEC03 10:00	23DEC03 11:59							
047	BF22110120	1200202110	ROLL TAGS TO YELLOW FOR PMT ON 1MOV3728OP	MOV	02JAN04 11:59	2	23DEC03 11:00	23DEC03 12:59							
067	BF30311030	0200300311	CLEAR TAGS FOR 0LT2002	IM2		2	23DEC03 11:00	23DEC03 12:59							
041	BF32447120	1200302447	1MOV509OP: MODIFY TAG-OUT TO YELLOW.	MOV	31MAY04 11:59	2	23DEC03 11:00	23DEC03 12:59							
042	HG24722240	1200204722	CLEAR TAG-OUT FOR 1MOV2450.	M1		2	23DEC03 12:00	23DEC03 13:59							
013	HG31518040	0200301518	CLEAR TAG OUT 0HVFP-528 1A SPR DRN	M1		2	23DEC03 13:00	23DEC03 14:59							
041	BF32447160	1200302447	1MOV509OP: CLEAR TAG-OUT.	MOV	31MAY04 11:59	2	23DEC03 14:00	23DEC03 15:59							
102	KL31976060	0200301976	P/O CLEAR TAGS ASSOCIATED WITH THE JOB	PMG		2	23DEC03 14:00	23DEC03 15:59							

NUCLEAR MEDIUM RISK

NUCLEAR MEDIUM RISK

SYS	ACTIVITY ID	INV #	ACTIVITY DESCRIPTION	UNIT	START DATE	END DATE	CRIC	STRT	FINISH	21	22	23	24	25	26	27	28	29	30
TAG																			
047	BF22110140	1200202110	CLEAR TAGOUT 1MOV37280P	MOV	02JAN04 11:59	23DEC03 15:00	2	23DEC03 15:00	23DEC03 16:59										
045	EK24970130	1200204970	CLEAR TAG OUT:12SSFP SL.WTR.BSTRPP RPLC OILER	FINM		23DEC03 15:00	2	23DEC03 15:00	23DEC03 16:59										
044	EK32499140	1200302499	CLEAR TAGOUT FOR #12 SEAL WTR BSTR PP 1HS4488	FINE		23DEC03 15:00	2	23DEC03 15:00	23DEC03 16:59										
045	HG30273130	1200300273	CLEAR TAG OUT, 12 SGFP SEAL WTR BOOSTER PP	M1		23DEC03 15:00	2	23DEC03 15:00	23DEC03 16:59										
102	PE010234WZ	PE00102	PE-0-102-34-O-W PERF TAGGING AUDIT PER NO-1-112	OPPS		26DEC03 07:00*	1	26DEC03 07:00*	26DEC03 07:59										
WS1																			
083	PO14690110	1200104690	P/O*1DR-17:SHOP PREFAB CRMOPLY REPLACEMENT.	WS1		15DEC03 09:00A	66	15DEC03 09:00A	26DEC03 07:59										
047	PO32702100	1200302702	P/O PREFAB NEW PN.*2*GB13-1031 D/S 1MOV3730.	WS1		19DEC03 07:00A	20*	19DEC03 07:00A	22DEC03 16:59										
WS2																			
086	EK30968030	0200300968	FAB STEEL FOR OBSERVATION PORTS	PMG		22DEC03 14:00	15	22DEC03 14:00	26DEC03 08:59										
086	EK30968040	0200300968	RIG GRATING & STEEL	PMG		26DEC03 09:00	10	26DEC03 09:00	29DEC03 08:59										

2012-12-18
 14:00
 08:59
 2012-12-18
 09:00
 08:59

Unit 1, MODE 3

MG	Sys	MO #	Equipment ID	Estimated Complete Date	Pri	CAP	Estimated Complete Date	Pri	CAP	Clearance ID	Ready	Comments	Unit Count
MG	019	1200102098	1CV2085	01/16/2004	4	5 F	12003G0904	N	APPROVED FOR WALKDOWN ONLY (PROC IS T. KELLAM). CONTINGENT ON HP RESOURCES [ADDED 10/20/03]				1
			REPLACE 1CV2085 & ADD TEST TEE PER ES200000714-003 & ES200100207-000	AP0 01/16/2004									
				NI									
				NRS									
				TAG									
				W									

Unit 1, MODE 5

MG	Sys	MO #	Equipment ID	Estimated Complete Date	Pri	CAP	Estimated Complete Date	Pri	CAP	Clearance ID	Ready	Comments	Unit Count
A1	019	1200304232	1SYS019		2	5		N	ADDED TO FOWL 12/18/03 BASED ON PRI-2 DESIGNATION.				2
			REPAIR 3/4" IA LINE UPSTREAM OF 1-IA-332 & 333, RESTORE T/A 1-03-044										

Unit 1, EXTENDED DURATION/CONTINGENCY

MG	Sys	MO #	Equipment ID	Estimated Complete Date	Pri	CAP	Estimated Complete Date	Pri	CAP	Clearance ID	Ready	Comments	Unit Count
IAJ	064	1200301717	1PUMPRC11B		2	5 F		N	EST. DURATION- 110 HRS. ADDED TO FOWL ON 12/15/03 BASED ON SEAL PERFORMANCE DURING THE 2004 RFO				3
			CONTINGENCY, REPLACE 11B RCP SEAL										

Unit 1, AWAITING RESOLUTION

MG	Sys	MO #	Equipment ID	Estimated Complete Date	Pri	CAP	Estimated Complete Date	Pri	CAP	Clearance ID	Ready	Comments	Unit Count
INE	098	1200304027	1RY1E01/64GX	01/15/2004	3	3		N	AWAITING SCR (BODINE)				4
			RECEIVED ALARM ON 1C01 AND 1E01 MAIN GENERATOR FIELD GROUND ALARM (64G)										

Unit 2, MODE 3

IG	Sys	MO #	Equipment ID	A S C	SO t i d e	Estimated Complete Date	Pri	CAP	M O T e g	Clearance ID	Ready	Comments	Unit Count
IG	019	2200101242	2CV2085	P1	A7	01/16/2004	4	5	F		N	APPROVED FOR WALKDOWN ONLY [POC T. KELLAM]. CONTINGENT ON HP RESOURCES [ADDED 10/20/03]	1
					PMA	07/28/2004							

Unit 2, MODE 5

IG	Sys	MO #	Equipment ID	A S C	SO t i d e	Estimated Complete Date	Pri	CAP	M O T e g	Clearance ID	Ready	Comments	Unit Count
2	064	2200303783	2LT156	P8	A7	01/20/2004	3	CAP1	5	N	N	MO INCLUDES REPAIRS TO 2LT186 [MO#2200302337]. ONCE PLANNED, MO FOR 2LT186 SHOULD BE FORCED CLOSED. PO WORK ON OSS NEEDED TOBE COMPLETED BEFORE TAKING TO READY LIST. EST. DURATION ~ 10 HRS. REQUIRES ~ 8 HRS OF PO BENCH TESTING. ONCE PLANNED, PO WORK W/NEED TO BE ADDED TO OSS. WORK LOCATIONS ARE 45' O/S BIO-SHIELD AND RCP BAYS. ADDED TO FOWL ON 10/27/03	2

Unit 2, AWAITING RESOLUTION

IG	Sys	MO #	Equipment ID	A S C	SO t i d e	Estimated Complete Date	Pri	CAP	M O T e g	Clearance ID	Ready	Comments	Unit Count
2	093	2200303302	2CVMT-24OP	P8	A5		3		3	F	N	EST. DURATION - 3.5 HRS	3

Unit 1, QUICK TRIP RECOVERY

MG	Sys	MO #	Equipment ID	Unit Count	A	S	S	Estimated Complete Date	Pri	CAP	M	O	T	Clearance ID	Ready	Comments
11	064	1200300466	1LE186	S3						CAP1	N				Y	THIS MO NEEDS TO BE FORCED CLOSED TO MO#1200203918 (RFO PMO) AT THE START OF THE 04 RFO.
			REPAIR 1LE186, 12B RCP OIL LVL, CLEAR T/A													
			1-03-0006 WHEN REPAIRED													

Unit 1, MODE 3

MG	Sys	MO #	Equipment ID	Unit Count	A	S	S	Estimated Complete Date	Pri	CAP	M	O	T	Clearance ID	Ready	Comments
NM	098	1200205336	1SYS098	P5							N				Y	INSPECT FOR LEAKS ONLY IN MODE-3, REPAIR AS MANY AS POSSIBLE RESOURCES PERMITTING.
			U1 MN GEN/IBDCS OIL LEAKS: INSPECT & REPAIR AS POSSIBLE IN MODE 3													
1	064	1200300514	1SYS064	S5							N				Y	PERFORM IF NOT DONE IN PAST 30 DAYS. MODE-3 RESTRAINT WALKDOWN
			U-1 FORCE OUTAGE ISI BORIC ACID MODE 3													

Unit 1, MODE 5

MG	Sys	MO #	Equipment ID	Unit Count	A	S	S	Estimated Complete Date	Pri	CAP	M	O	T	Clearance ID	Ready	Comments
M1	004	1200302257	1CS152-1413	S3							F				Y	ESTIMATED DURATION = 9 HRS. AFFECTS 480V BUS 14B BREAKER. SAME COMMENTS THAT APPLY TO MO#1200302275
			REPLACE 1CS152-1413 DUE TO CRACKED LEXAN CAM FOLLOWERS													
INE	005	1200302244	1CS62-1413	S3							F				Y	ESTIMATED DURATION = 9HRS AFFECTS 480V BREAKER 14B. SAME COMMENTS AS MO#1200302275
			REPLACE 1CS52-1413 DUE TO CRACKED LEXAN CAM FOLLOWERS													
A1	045	1200301970	1Z1111	S3							F				Y	EST. DURATION IS 12 HRS.
			REMOVE METAL OXIDE VARISTORS FROM FRV POSITION INDICATORS, 1C03													
	064	1200302849	1TE177	S3							F				Y	EST. DURATION ~17 HRS. JOB REQUIRES SCAFFOLD TO ACCESS RCP SHROULD (DURATION INCLUDES 8 HRS FOR SCAFFOLD INSTALL & 4 HRS TO REPAIR TE'S).
			INSPECT AND REPAIR 12A RCP LOWER GUIDE BRG TE, 1TE177,													
11	041	1200303133	1CV500	S3							F				Y	EST. DURATION ~28 HRS.
			OVERHAUL 1CV500.													
	047	1200302897	1RV1414	S3							F				Y	EST. DURATION ~20 HRS. ADDED TO FOWL 10/27/03.
			REMOVE, TEST & REINSTALL 1RV1414													

Forced Outage Worklist - Heady

IMG	Sys	MO #	Equipment ID	S	S C	Estimated Complete Date	Pri	CAP	M O T	Clearance ID	Ready	Comments	Unit Count
A1	047	1200303835	1CV1447	S	S O								10
			1CV1447 LEAKING PAST SHUT SEAT. PIPING UPSTREAM OF 1CV1447 IS HOT TO T	t	id							11A HI LEVEL DUMP VLV. EST. DURATION ~ 36 HRS. ADDED TO FOWL ON 12/1/03	
	099	1200300685	1CRNCNTMTPOLAR	S	S O								11
			REPL U1 POLAR CRN MAIN HOIST INNER FRAME TO OUTER HOIST HOUSING BOLT.	t	se							ENGINEERING TO MOVE CRANEFLOWER HOOK TO INSTALL NOT APPROVED FOR MODE:3 AT THIS TIME. (GPP 5/16/03)	

Unit 1, EXTENDED DURATION/CONTINGENCY

IMG	Sys	MO #	Equipment ID	S	S C	Estimated Complete Date	Pri	CAP	M O T	Clearance ID	Ready	Comments	Unit Count
3M1	004	1200302258	1CS152-1402	S	S O								12
			REPLACE 1CS152-1402 DUE TO CRACKED LEXAN CAM FOLLOWERS	t	id							ESTIMATED DURATION = 9HRS AFFECTS 480V BREAKER 14A. SAME COMMENTS AS MO#1200302275	
	004	1200302262	1CS152-1102	S	S O								13
			REPLACE 1CS152-1102 DUE TO CRACKED LEXAN CAM FOLLOWERS	t	id							ESTIMATED DURATION = 9HRS AFFECTS 480V BREAKER 11B. SAME COMMENTS AS MO#1200302275	
	004	1200302264	1CS152-1114	S	S O								14
			REPLACE 1CS152-1114 DUE TO CRACKED LEXAN CAM FOLLOWERS	t	id							ESTIMATED DURATION = 9HRS AFFECTS 480V BREAKER 11A. SAME COMMENTS AS MO#1200302275	
	005	1200302253	1CS52-1412	S	S O								15
			REPLACE 1CS52-1412 DUE TO CRACKED LEXAN CAM FOLLOWERS	t	id							ESTIMATED DURATION = 9HRS AFFECTS 480V BREAKER 14A. SAME COMMENTS AS MO#1200302275	
	005	1200302260	1CS52-1113	S	S O								16
			REPLACE 1CS52-1113 DUE TO CRACKED LEXAN CAM FOLLOWERS	t	id							ESTIMATED DURATION = 9HRS AFFECTS 480V BREAKER 11B. SAME COMMENTS AS MO#1200302275	
	005	1200302275	1CS52-1112	S	S O								17
			REPLACE 1CS52-1112 DUE TO CRACKED LEXAN CAM FOLLOWERS	t	id							ESTIMATED DURATION = 9HRS AFFECTS 480V BUS 11A BREAKER WHICH W/NEED TO BE REMOVED FROM SERVICE OR EVALUATE BREAKER NOT ABLE TO OPERATE WHILE CONTROL SWITCH IS REPLACED. [KRI]	
	064	1200300292	1MH101	S	S O								18
			U-1 RCP MOTOR START CIRCUITRY INTERLOCK VERIFICATION (FORCED OUTAGE)	t	id							PERFORM ASAP. DO NOT AFFECT CRITICAL PATH. SCOPE DELETE IF NECESSARY.	

Forced Outage Worklist - Ready

MG	Sys	MO #	Equipment ID	Unit Count	A S C S O I D S E	Estimated Complete Date	Pri	CAP	M O T D E G	Clearance ID	Ready	Comments	Unit Count
M1	087	1200302407	1XU-25000-11 ADJUST TAPS ON U-25000-11 & 12 (CHANGE VOLT OUTPUT)	19	S3	1200300315 1200301047	F	1200300341 1200300913	Y	PER (DOCKSTADER) REQUEST THIS TO SUPPORT RELIABLE GRID OPERATION. ONLY APPLIES TO U/1 XFORMERS. ESTIMATE 3 DAYS OF WORK. SSPD AND EM NEEDED TO SUPPORT.	Y		
11	064	1200205095	1TE184 REPLACE 1TE184	20	S3		F		Y	REQUIRES SCAFFOLDING TO ACCESS 12B RCP SHROULD. TEBLEED-OFF FLOW TEMP)LOCATED IN UPPER SHOULD AREA.	Y		
	064	1200303159	1TTA179 INSPECT CONNECTIONS FOR 1TE179, 12A RCP THRUST BRG TEMP	21	S3 NI		F		Y	PER A. FISSEL, MAY BE RELATED TO CTMT FEED THROUGH. ESP SUBMITTED TO SHIFT CABLES TO SPARE FEED. MOVEMENT OF CABLES CAN BE DONE IN MODE-1 VIA AN ENTRY TO 45' (DOSE ISSUE), AND IF LOCATION IS ACCESSIBLE AND WILL NOT CHALLENGE OPERATIONS (8/12/03) GPP	Y		
1	041	1200302409	1CV110P GENERATE A UNIT 1 MO TO IMPLEMENT T/A 1-03-0011.	22	S3		F		Y	ONLY NEEDED IF DECISION MADE TO PERFORM A PEROXIDE ADDITION. T/A CAN BE USED FOR EITHER 110 P OR Q DEPENDING ON OPERATIONAL CONDITIONS AT TIME OF S/D. T/A CAN BE INSTALLED IN MODE-3, PLACED INSERVICE ONCE <550# //GPP	Y		
	052	1200205194	1CV642OP INSPECT 1CV642 ACTUATOR / REPAIR AS REQ'D.	23	S3		F		Y	AF/AL LRT REQUIRED. ALSO REQUIRES DEPRESS/VENT ALL 4 SITS.	Y		
AJ	064	1200203300	1PUMPRC11B *C* BALANCE SHOT ON 11B RCP	24	S3		F	1200201144	Y		Y		

Unit 1, FORCED OUTAGE REPTASK

MG	Sys	MO #	Equipment ID	Unit Count	A S C S O I D S E	Estimated Complete Date	Pri	CAP	M O T D E G	Clearance ID	Ready	Comments	Unit Count
M1	055	1200300287	1PLATCEDM DISCON/RECON U-1 MISSILE SHIELD, ELECT PLAT & RX HEAD: RV-3 (FOWL)	25	S3 TAG		F		Y	MUST BE DONE TO SUPPORT VENTING OF CEDMS OR ANYTIME RCS IS DEPRESSURIZED.	Y		
	098	1200204832	1FLISOPHASE12 REPLACE ISOPHASE BUS DUCT FILTERS (FORCED OUTAGE)	26	S3		N		Y	REPLACE ONLY IF UNIT HAS BEEN OPERATING FOR GREATER THAN 6 MONTHS SINCE LAST FILTER CHANGE. LAST FLT CHANGE 11/9/02.	Y		
	099	1200300294	1CRNCNTMTPOLAR UNIT 1 POLAR CRANE INSPECTION (FORCED OUTAGE)	27	S3		N		Y		Y		

MG	Sys	MO #	Equipment ID	A	SC	S	so	id	Estimated Complete Date	Pri	CAP	ed	g	Clearance ID	Ready	Comments	Unit Count
A1	041	1200300286	1FT202	S3													28
			ISOLATE AND EQUALIZE 1FT202 & 1FT212 TO SUPPORT OPS (FORCED OUTAGE)														
	045	1200300285	1LT1105	S3												NOTE: NOT REQD TO INSTALL SIGHTGLASS & SAMPLE POINTS IF ACTUAL MODE-5 DURATION IS < 24 HOURS.//JWS	29
			INSTALL TEMPORARY S/G SIGHTGLASSES AND SAMPLE POINTS (FORCED OUTAGE)														
	046	1200205012	1LC1446	S3													30
			PLACE LPFWHS IN SERVICE PER 1-34 FOLLOWING FORCED OUTAGE														
1GCEU	064	1199700608	1PUMPRC11A	S3													31
			PERFORM FULL SPECTRUM VIBRATION ANALYSIS OF RCPS DURING FORCED OUTAGES														
11	042	1200302328	1HXWTRBOX11A	S3	F	1200300593	Y									REVIEW FO PLAN FOR SEQUENCE OF WB CLEANING. ALTHOUGH DESIGNATED A RETASK, HIGH DESIRE TO PERFORM CLEANING IN ANY FO CONDITION.	32
			INSPECT & CLEAN U-1 WATER BOXES AS REQUESTED BY OPS (FORCED OUTAGE).			1200300594											
						1200300595											
						1200300596											
						1200300597											
						1200300598											
	059	1199700986	1DOOR69	S3	N		Y										33
			ADJUST/REPACK EMER. AIR LOCK (EAL) AS REQUIRED. (FORCED OUTAGE)														
	059	1199704160	1DOOR67	S3	N		Y										34
			REMOVE AND INSTALL U-1 EQUIP HATCH TO SUPPORT (FORCED OUTAGE)														
	059	1199705243	1DOOR68	S3	N		Y										35
			ADJ/REPACK PAL LINE SHAFT / CLEAN/REPLACE DOOR SEALS (FORCED OUTAGE)														
	059	1199803944	1DOOR68	S3	N		Y										36
			DEFEAT / ESTABLISH U-1 PAL (FORCED OUTAGE)														
	064	1200204828	1PZVRC11	S3	F		Y										37
			REM AND REINST PZR MANWAY (FORCED OUTAGE).														

Forced Outage Worklist - Ready

MG	Sys	MO #	Equipment ID	A S C S O I D S E	Estimated Complete Date	Pri	CAP	M O T D E G	Clearance ID	Ready	Comments	Unit Count
1	064	1200204029	1PZVRC11 (FORCED OUTAGE) INSTALL AND REMOVE UNIT-ONE PZR VENT RIG	S3		N				Y		38
	064	1200204830	1MH101 CHECK & ADD OIL TO U-1 RCP MOTORS AS REQUIRED. (FORCED OUTAGE)	S3		N				Y		39
	064	1200204834	1PZVRC11 VENT U-1 CEDM'S. (FORCED OUTAGE)	S3		N				Y	MUST BE DONE ANYTIME RCS IS DEPRESSURIZED.	40
	093	1200204831	1FLEHC11 (FORCED OUTAGE) REPLACE #11 & #12 PALL HP EHC DISCH FILTERS, MPM07103	S3		F	1200300319			Y		41
	099	1200002673	1CRNCNTMTPOLAR LUBRICATE, CHANGE OIL, INSPECT UNIT-1 POLAR CRANE (FOWL)	S3		F	1200201077			Y		42
	099	1200204833	1CRNCNTMTPOLAR PERFORM NDE ON LARGE/SMALL HOOKS, UNIT-1 POLAR CRANE (FOWL)	S3		F	1200201077			Y		43
12	060	1199705318	1CV1412 (FORCED OUTAGE) INSP/LUBE U1 CONTAINMENT PURGE AIR EXH VLV IAW VLV. 39	S3		F	1200300325			Y		44
IAJ	064	1200000681	1MH101 MANUALLY ROTATE IDLE RCP MOTORS DURING UNIT 1 FORCED OUTAGE	S3 TAG		F				Y		45
IMC	052	1200002968	1CV306 PROVIDE SCAFFOLD SUPPORT AT 5' U-1 AUX BUILDING (FORCED OUTAGE).	S3		N				Y		46
GEM	097	1200300282	1SYS097 RELAMP UNIT ONE CONTAINMENT AT THE BEGINNING OF EACH FORCED OUTAGE	S3		N				Y	AS NEEDED TO SUPPORT CNTMT ENTRIES/MAINTENANCE.	47
VS1	059	1200000678	1PEN14 REMOVE/INSTALL PURGE BLANK FLANGE IAW HE-52 AT #14 PENETRATION	S3		F	1200300325			Y		48
	059	1200300290	1PEN13 REMOVE/INSTALL PURGE BLANK FLANGE IAW HE-52 AT #13 PENETRATION	S3		F	1200300325			Y		49

Unit 2, QUICK TRIP RECOVERY

RMG	Sys	MO #	Equipment ID	Unit Count	A	S	C	Estimated Date	Pri	CAP	M	O	T	Clearance ID	Ready	Comments
IM2	046	2200302565	2ZS1436A	1	P5	t	id	Estimated Date							Y	EST. DURATION = 3.5 HRS
			REPAIR 2-ES-1436-BTV CLOSED LIMIT SWITCH			a	se									
	046	2200302570	2ZS1432A	2	P5	t	id								Y	EST. DURATION = 3.5 HRS.
			REPAIR 2-ES-1432-BTV CLOSED LIMIT SWITCH			a	se									
	064	2200302337	2LT186	3	S3	t	id								Y	AWAITING FULL PLANNING OF MO2200303783(INCORPORATES ALL U/2 RCP'S)
			REPLACE 2LT186 TRANSMITTER CARDS.			a	se									

Unit 2, MODE 3

RMG	Sys	MO #	Equipment ID	Unit Count	A	S	C	Estimated Date	Pri	CAP	M	O	T	Clearance ID	Ready	Comments
IM2	093	2200302793	2CVMT-22OP	4	S3	t	id								Y	ESTIMATED DURATION -8 HRS. IM2 BELIEVES IT CAN COMPLETE WORK IN TIME. IF NOT, SHOP W/BACK OUT.
			REPLACE ACTUATION (SPACER LINK) ARM ON 2CVMT-22, U2 MN TURB 22 GOV VLV			a	se									
	093	2200303592	2CVMT-21OP	5	S3	t	id								Y	EST DURATION IS ~12HRS. IM2 BELIEVES IT CAN BE COMPLETE WORK IN TIME. IF NOT, SHOP W/BACK OUT. THIS IS INDICATION ONLY, NOT CONTROL. [ADDED 10/20/03]
			INSPECT & ADJ GV-1,2,3,4 LIMIT SWITCH ASSEMBLIES AND LINKAGES.			a	se									
ISI	064	2200300386	2SYS064	6	S5	t	id								Y	PERFORM IF NOT DONE IN PAST 30 DAYS
			U-2 FORCED OUTAGE ISI BORIC ACID MODE 3 WALKDOWN IN U-2 CONTAINMENT			a	se									MODE-3 RESTRAINT

RMG	Sys	MO #	Equipment ID	Unit Count	A	S	C	Estimated Date	Pri	CAP	M	O	T	Clearance ID	Ready	Comments
M2	064	2200302562	2CV100FOP	7	S3	t	id								Y	REQUIRES OPS SUPPORT TO STANDBY TO ADJUST SPRAY ADJUST SPRING ADJUSTOR NUT TO CLOSE THE VALVE. ITS OPEN 1/16".
			ADJUST SPRING ADJUSTOR NUT TO CLOSE THE VALVE. ITS OPEN 1/16".			a	se									
	098	2200303816	2SYS098	8	S3	t	id								Y	11/13/03 - TASK ADDED TO FOWL. INVOLVES MOVEMENT OF PERFORM "TRIM" BALANCE SHOT FOR THE EXISTING BALANCE SHOT ON EXCITER FAN. EST. DURATION NO. 11 BEARING (MAIN TURBINE) FOWL. <15 MINS.
			PERFORM "TRIM" BALANCE SHOT FOR THE NO. 11 BEARING (MAIN TURBINE) FOWL.			a	se									

Unit 2, MODE 5

RMG	Sys	MO #	Equipment ID	Unit Count	A	S	C	Estimated Date	Pri	CAP	M	O	T	Clearance ID	Ready	Comments
EM2	004	2200302416	2CS152-2114	9	S3	t	id								Y	AFFECTS 480V BUS BREAKER 21A. SAME COMMENTS AS MO#2200302414
			REPLACE 2CS152-2114 DUE TO CRACKED LEXAN CAM FOLLOWERS			a	se									

Forced Outage Worklist - Ready

MSG	SYS	MO #	Equipment ID	A S C S O I D	Estimated Complete Date	Pri	CAP	o T e g	Clearance ID	Ready	Comments	Unit Count
M2		005	2200302418 2C552-2112	S3	TAG	F				Y	AFFECTS 480V BUS BREAKER 21A. SAME COMMENTS AS MO#2200302414	10
			REPLACE 2C552-2112 DUE TO CRACKED LEXAN CAM FOLLOWERS									
INM		047	2200300284 2CV3722 2CV3722(OP), OVERHAUL VALVE & ACTUATOR	S3	S	F			2200300663	Y	EST. DURATION -50 HRS. NEED RDV-163AND 167 TO HOLD TO WORK THIS ONLINE. CURRENTLY, RDV-163 LEAKS BY.	11
M2		045	2200302491 2PDT4516	S3	TAG	F				Y	EST. DURATION IS 12 HRS FOR REPAIR.	12
			RETUBE/REROUTE SENSING LINE FROM 2HBFW-1100 TO UNION OF 2PDT4516 HP SU									
		048	2200302027 22/4AL-XA28	S3		N				Y	ESTIMATED DURATION = 4HRS	13
			REPLACE DSS MODULE ON ESFAS AL LOGIC									
		064	2200302356 2TE176	S3	TAG	F				Y	CONSIDER FOR MODE-3 EXTENDED DURATION FO IF RESOURCES ALLOW.	14
			INSPECT/REPAIR 22A RCP UPPER GUIDE BEARING TEMPERATURE, 2TE176.									
		064	2200302407 2VE21-28	P5		N				Y	EST. DURATION = 6 HRS TO REPAIR & TEST. MAY REQUIRE SCAFFOLD TO SUPPORT ACCESS TO JUNCTION BOX. SCAFFOLD INSTALLATION ~ 4HRS.	15
			REPAIR LOOSE PARTS MONITORING SYSTEM CH #8, 22 S/G BOTTOM SKIRT									
		093	2200302107 2XE8251-20	S3	TAG	F			2200300718	Y	ACTIVITY CODED FOR MODE-3 BUT DURATION EXCEEDS BASELINE. MOVED TO MODE-5 FO.	16
			INVEST & REPAIR FAULT WITH GOV END ROTOR POSITION DIFF. EXPANSION									
		093	2200302145 2CVMT-21	S3		N				Y	2T11 WORK. ESTIMATED DURATION = 25 HRS (BASES FOR MODE-5 DISPOSITION)	17
			REPAIR MAIN TURBINE GOVERNOR VALVE 1 OSCILLATIONS, AUTOMATIC CKT									
M2		041	2200302213 2CV500	S3	TAG	F				Y	EST. DURATION -28 HRS.	18
			OVERHAUL 2CV500 DUE TO LEAK-BY.									
		064	2200302039 2CV100F	S3	TAG	F				Y	R407496 PLUG 90595 (1) W/GENE FARRELL 8/21, R407497 PLATE 96P56 (1) W/WAYNE 8/22 OPS PROCEDURE NEEDS TO BE CHANGED TO SUPPORT MAINT.	19
			OVERHAUL 2CV100F VALVE ONLY 1AW VALVE-4.									
NS2		062	2200302074 2HVS1-522	S3	TAG	F				Y	EST. DURATION = 4 HRS. -3 HRS OF SHOP PRE-FAB WORK REQUIRED.	20
			REPLACE SAMPLE VALVE 2HVS1-522, #21B SIT									
		064	2200302013 2HVRC-140	S3	TAG	F				Y	NOT A MODE RESTRAINT. VALVE HAS SINGLE ISOLATION AT THIS TIME. JOB CAN BE WORKED WITH PZR MW ON WITH A BUBBLE.	21
			REPLACE VALVE 2HVRC-140 ASSEMBLY									

MG	Sys	MO #	Equipment ID	SC	SO	Estimated Complete Date	Pri	CAP	o T	Clearance ID	Ready	Comments	Unit Count
IS2	074	2200102007	OHVN2-272	S	3			F	2200300662	Y	ESTIMATED DURATION = 16 HRS		22
REPLACE VALVES OHVN2-272 & 595:#21/22 S/G & #21 PZR QTK N2 SUPPLY VLVS													

Unit 2, EXTENDED DURATION/CONTINGENCY

MG	Sys	MO #	Equipment ID	A	SC	Estimated Complete Date	Pri	CAP	M	o T	Clearance ID	Ready	Comments	Unit Count
M2	004	2200302405	2CS152-2413	S	3			F		Y	AFFECTS 480V BUS BREAKER 24B. SAME COMMENTS AS MO#2200302414	Y		23
REPLACE 2CS152-2413 DUE TO CRACKED LEXAN CAM FOLLOWERS														
	004	2200302414	2CS152-2102	S	3			F		Y	AFFECTS 480V BUS BREAKER 21B. BREAKER W/NEED TO BE REMOVED OR EVALUATED FOR RISK DUE TO BREAKER NOT OPERABLE WHILE CONTROL SWITCH IS REPLACED. [KR]	Y		24
REPLACE 2CS152-2102 DUE TO CRACKED LEXAN CAM FOLLOWERS														
	004	2200302444	2CS152-2402	S	3			F		Y	AFFECTS 480V BUS BREAKER 24A. SAME COMMENTS AS IN MO#2200302414	Y		25
2CS152-2402 13/4 KV BKR 152-2402 C/S HAS CRACKED CAM FOLLOWERS (LEXAN)														
	005	2200302402	2CS52-2413	S	3			F		Y	AFFECTS 480V BUS BREAKER 24B. SAME COMMENTS AS MO#2200302414	Y		26
REPLACE 2CS52-2413 DUE TO CRACKED LEXAN CAM FOLLOWERS														
	005	2200302403	2CS52-2412	S	3			F		Y	AFFECTS 480V BUS BREAKER 24A. SAME COMMENTS AS MO#2200302414	Y		27
REPLACE 2CS52-2412 DUE TO CRACKED LEXAN CAM FOLLOWERS														
	005	2200302423	2CS52-2113	S	3			F		Y	AFFECTS 480V BUS BREAKER 21B. SAME COMMENTS AS MO#2200302414	Y		28
REPLACE 2CS52-2113 DUE TO CRACKED LEXAN CAM FOLLOWERS														
	041	2200302424	2HS224Y	P	5			F		Y	EST. DURATION ~ 7 HRS. MAINTENANCE TAKES OUT ALL THREE CHARGING PUMPS. MOVED BACK TO EXTENDED DURATION/CONTINGENCY LIST 10/31/03 GPP	Y		29
REPLACE 2HS224Y DUE TO CRACKED LEXAN CAM FOLLOWERS														
	041	2200302425	2HS224X	P	5			F		Y	EST. DURATION ~ 7 HS. MAINTENANCE TAKES OUT ALL 3 CHARGING PUMP. RETURNED TO EXTENDED DURATION/CONTINGENCY LIST ON 10/31/03 GPP	Y		30
REPLACE 2HS224X DUE TO CRACKED LEXAN CAM FOLLOWERS														

Forced Outage Worklist - Ready

IMG	Sys	MO #	Equipment ID	A S C S O I D S E	Estimated Complete Date	Pri	CAP	M O T D E G	Clearance ID	Ready	Comments	Unit Count
M2	064	2200103812	2MH101	S3				N		Y	PERFORM ASAP. DO NOT PERFORM ON CRITICAL PATH, DELETE FROM SCOPE IF NECESSARY. EST DUR = 4 HRS	31
			U-2 RCP MOTOR START CIRCUITRY INTERLOCK VERIFICATION (FORCED OUTAGE)									
M2	064	2200302043	2VE21-27	S3	NMI			N		Y	FOR FOWL: SYS ENG ONLY WANTS TO CHECK THE HARD LINE CONNECTION TO ACCELEROMETER & CHECK JUNCTION BOX FOR THE LINE DRIVER CONNECTIONS.//JWS PER CHRIS DOBRY: TASK NEEDS TO BE DONE IN MODE-5 NOT MODE-3 DUE TO ENVIRONMENTAL HEAT IMPACTS ON PERSONNEL FOR THE WORK AREA.//JWS	32
			INSPECT FIELD CABLE AND INLINE DRIVER FOR 2VE2127, 22 S/G MANWAY COVER									
	064	2200302281	2VE173	S3		CAP2	F	F		Y	ESTIMATE JOB DURATION IS 16 HRS.	33
			INVESTIGATE AND REPAIR FAULTY 22A (2VE173) RCP VIBRATION INDICATION									
	093	2200102097	2TE4404-21	S3			N	2200200542		Y	THE TE NEEDS REPLACEMENT. ACCESS TO THE THERMOCOUPLE REQUIRES DISASSEMBLY OF THE TURBINE. 2-TR-4421 PT 21 (22 LP INL INNER CYLINDER TEMP) MAKING STEP CHANGES 50 DEG. F. PER TAGGING, THIS WILL REQUIRE TURBINE DISASSEMBLY. T/O WOULD ALSO INVOLVE MS & CONDENSER VACUUM.	34
			REPLACE 2TE4404-21 ON 21B LP TURB INLET CYLINDER									
M2	041	2200302566	2CV110P	S3	TAG		F	2200300706		Y	ONLY NEEDED IF DECISION MADE TO PERFORM A PEROXIDE ADDITION. T/A CAN BE USED FOR EITHER 110 P OR Q DEPENDING ON OPERATIONAL CONDITIONS AT THE TIME OF S/D. T/A CAN BE INSTALLED IN MODE-3, PLACED INSERVICE ONCE <550#//GPP	35
			GENERATE A UNIT 2 MO TO IMPLEMENT T/A 2-03 0021.									
	064	2200001628	2MH101	S3	TAG		F			Y	MANUALLY ROTATE IDLE RCP MOTORS (FORCED OUTAGE)	36
			MANUALLY ROTATE IDLE RCP MOTORS (FORCED OUTAGE)									
	064	2200302231	2LT110Y	P1			N			Y	MO IS TO CHECK CONNECTIONS AND DRAIN ISOL VALVES.//JWS	37
			CHANNEL Y PRESSURIZER LEVEL INDICATION ON BOTH 2LI-110Y-1 AND 2LIC-110									
	064	2200302556	2RV201	S3			N			Y	CONTINGENCY MO TO PERFORM VALVE-66 ON 2RV200 / 201 IF VALVES LEAK.	38
			CONTINGENCY MO TO PERFORM VALVE-66 ON 2RV200 / 201 IF VALVES LEAK.									
	093	2200102944	2ZE8251C	S3			F	2200200322		Y	MAJOR MACHINERY HAS TO REMOVE MAIN TURBINE CASING TO SUPPORT THIS WORK. SHOULD ONLY BE WORKED IF EMERGENT TURBINE ISSUES REQUIRE TURBINE WORK.	39
			DETERMINE CAUSE FOR ROTOR POSITION ALARM @ 2C02 AND REPAIR.					2200200478 2200200542				

MG	Sys	MO #	Equipment ID	Unit Count	A	S	C	Estimated Complete Date	Pri	CAP	o T	Clearance ID	Ready	Comments
2	093	2200302254	2FANMTL ORESVE21	S3	40	+	+		F	2200300707	Y		Y	REPAIRS HAVE BEEN TRIED ONLINE BEFORE. OIL VAPORMIST CREATED POSES SAFETY ISSUES TO WORKERS. MAINT (DIONNE) REQUEST JOB REMAIN ON FOWL. 2 SHIFTS TO REPAIR (GPP 5/29/03)

MG	Sys	MO #	Equipment ID	Unit Count	A	S	C	Estimated Complete Date	Pri	CAP	o T	Clearance ID	Ready	Comments
AJ	098	2200302233	2GENTURBGEN21	S3	41	+	+		F		Y		Y	SECONDARY ENG WILL BE MONITORING VIBRATIONS DURING START-UP //JWS L.RICHARDS WRITING AN IR TO PERFORM A BALANCE SHOTON THE EXCITER FAN FOR FUTURE FOWLS (MODE3) //JWS CURRENT VIBE DATA FOR OCTOBER SUPPORTS NOT PERFORMING THE BALANCE SHOT //JWS INDICATES ESTIMATE 3 SHIFTS TO PERFORM. MOVED TO EXTENDED DURATION/CONTINGENCY LIST (5/21/03 GPP)
OV	064	2200302439	2MOV403VLV	S3	42	+	+	06/15/2003	F	2200300667	Y		Y	NOT A MODE RESTRAINT. VALVE HAS SINGLE ISOLATION AT THIS TIME. JOB CAN BE WORKED WITH PZR MW ON WITH A BUBBLE. MO IS FOR TRACKING THE T/A ONLY. THIS MO DOES NOT PERFORM THE WORK TO INSTALL THE T/A //JWS

Unit 2, FORCED OUTAGE REPTASK

MG	Sys	MO #	Equipment ID	Unit Count	A	S	C	Estimated Complete Date	Pri	CAP	o T	Clearance ID	Ready	Comments
M2	055	2200101931	2PLATCEDM	S3	43	+	+		F		Y		Y	MUST BE DONE TO SUPPORT VENTING CEDMS, ANYTIME RCS IS DEPRESSURIZED
	098	2200103809	2FLISOPHASE22	S3	44	+	+		N		Y		Y	REPLACE ONLY IF UNIT HAS BEEN OPERATING > 6MO'S SINCE LAST FLT CHANGE. LAST FLT CHANGE 4/4/03
	098	2200300226	2GENTURBGEN21	S3	45	+	+		N		Y		Y	INSP GENERATOR EXCITER FUSES INTEGRITY AFTER PLANT TRIP(FORCED OUTAGE)
	098	2200300240	2GENTURBGEN21	S3	46	+	+		N		Y		Y	INSPECT COPPER BRAID AND ADJUST SHAFT GROUNDING DEVICE (FORCED OUTAGE)
	099	2200300239	2CRNCNMTPOLAR	S3	47	+	+		F		Y		Y	UNIT 2 POLAR CRANE INSPECTION (FORCED OUTAGE)

Forced Outage Worklist - Ready

IMG	Sys	MO #	Equipment ID	A S C S o l i d e t	Estimated Complete Date	Pri	CAP	M o d e s	Clearance ID	Ready	Comments	Unit Count
M2	041	2200000528	2FT202	S3				N		Y		48
			ISOLATE / EQUALIZE 2FT202, 2FT212, & 2F1500 TO SUPPORT OPS 01-2D - FOWL									
	045	2200001630	2LT1105	S3				N		Y	REQUIRED WHEN CHANGING FROM MODES 5 TO MODE 4 NOTE: NOT RECD TO INSTALL SIGHTGLASS & SAMPLE POINTS IF ACTUAL MODE-5 DURATION IS < 24 HOURS./JWS	49
			INSTALL TEMPORARY S/G SIGHTGLASSES AND SAMPLE POINTS (FORCED OUTAGE)									
	046	2200300235	2LC1446	S3				N		Y		50
			PLACE LFPWHS IN SERVICE PER I-34 FOLLOWING FORCED OUTAGE									
M/CEU	064	2200001318	2PUMPRC21A	S3				N		Y		51
			PERFORM FULL SPECTRUM VIBRATION ANALYSIS OF RCPS (FORCED OUTAGE)									
M1	099	2200000533	2CRNCNTMPOLAR	S3				N		Y		52
			PERFORM NDE ON LARGE/SMALL HOOKS, U-2 POLAR CRANE & SECURE CRANE.									
	099	2200000535	2CRNCNTMPOLAR	S3	TAG			F	2200300634	Y		53
			LUBRICATE, CHANGE OIL AND INSPECT UNIT-2 POLAR CRANE (FOWL)									
M2	042	2200203456	2HXWTRBOX21A	S3				F	2200200407	Y		54
			INSPECT & CLEAN U-2 WATER BOXES AS REQUESTED BY OPS (FORCED OUTAGE)						2200200409 2200200410 2200200411 2200200412			
	059	2199705902	2DOOR68	S3				N		Y		55
			(FORCED OUTAGE) DEFEAT / ESTABLISH UNIT 2 PERSONNEL AIR LOCK (PAL)									
	059	2199705903	2DOOR68	S3				N		Y		56
			U-2 PAL ADJUST PACKING/REPACK TO SUPPORT "LLRT" (FORCED OUTAGE).									
	059	2199705905	2DOOR69	S3				N		Y		57
			U-2 EAL ADJUST PACKING/REPACK TO SUPPORT "LLRT" (FORCED OUTAGE).									
	059	2199802434	2PEN13	S3				F	2200000086	Y		58
			(FORCED OUTAGE) REMOVE/REINSTALL PEN 13 BLIND FLANGE (HE-52).						2200000087		HE-52 HAS BEEN CHANGED. ENG ISSUED FOR REMOVING 11 BOLTS WHILE IN MODE-3.	

MG	Sys	MO #	Equipment ID	A S C	S O I D	Estimated Complete Date	Pri	M O T	Clearance ID	Ready	Comments	Unit Count
2	059	2199902566	2PEN14 (FORCED OUTAGE) REMOVE AND REINSTALL THE U-2 PEN 14 BLANK FLANGE	S3				F	2200000095	Y		59
	059	2200001626	2DOOR68 DEFEAT / ESTABLISH UNIT 2 PERSONNEL AIR LOCK (PAL) (FORCED OUTAGE)	S3				N		Y		60
	060	2199705949	2FL5289 (FORCED OUTAGE) INSP/REPLACE AS NEEDED #21 PURGE AIR EXHAUST FILTERS.	S3				F	1200300325	Y		61
	060	2199705950	2CV1412 (FORCED OUTAGE) INSPECT AND LUBE U2 CONTAINMENT PURGE AIR EXHAUST VLV	S3				F	1200300325	Y		62
	060	2199705951	2CV1410 (FORCED OUTAGE) INSP AND LUBE U2 CONTAINMENT PURGE AIR SUPPLY VLV IAW	S3				F	1200300325	Y		63
	064	2199705893	2PZVRC21 (FORCED OUTAGE) REMOVE/REPLACE UNIT-2 PZR MANWAY	S3				F	2199800401	Y		64
	064	2200001622	2PZVRC21 INSTALL/REMOVE U-2 PRESSURIZER VENT RIG (FORCED OUTAGE)	S3				N		Y		65
	064	2200103819	2MH101 ADD OIL TO U-2 RCP MOTORS (FORCED OUTAGE)	S3				N		Y		66
	064	2200300224	2MH101 MANUALLY ROTATE IDLE RCP MOTORS (FORCED OUTAGE)	S3				F		Y		67
	064	2200300229	2PZVRCX21 VENT U-2 CEDMS. (FORCED OUTAGE)	S3				N		Y	MUST BE DONE ANYTIME THE RCS IS DEPRESSURIZED	68
MC	052	2200300387	2CV306 PROVIDE SCAFFOLD SUPPORT AT 5' U-2 AUX BUILDING (FORCED OUTAGE).	S3				N		Y		69
	083	2200300385	2HVMS-1286 ERECT & REMOVE SCAFFOLDING TO SUPPORT STP-O-55A-2.	S3				N		Y		70

Forced Outage Worklist - Ready

Sys	MO #	Equipment ID	ASCS	Estimated Complete Date	Priority	Category	Clearance ID	Ready	Comments	Unit Count
M 097	2199802485	2SYS097	S3			N		Y	PRE-RISK ASSESSED FOR OTR ALWAYS TO BE CONSIDERED FOR ANY FO ON A "AS NEEDED BASIS" TO SUPPORT CONTAINMENT ENTRIES/MAINTENANCE.	71



Clearance ID

1200200332

CLEARANCE ORDER CO-1

System No: 041 System Description CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Scope/Comments for Clearance Order:

Rev: 0

MAIN BOUNDARIES FOR 1MOV514

Reviews

1st Review:	Information Only	Date/Time: _
2nd Review:		Date/Time: _
Order App'd:		Date/Time: _

Stub ID	MO	RMG	Accepted by	Date/Time

Order Completed Date/Time:



Clearance ID



1200200332

CLEARANCE ORDER CO-1

Seq	1					Y		Tag No.
	1HS2514	Eqp Id	CLOSED	Hang Pos				Restore Pos
BORIC ACID DIRECT MAKEUP								
1C07								
*MBOB OPS FOR MOV GROUP VOTES TESTING								
Tagger/Date	N/A		Verifier/Date					

Seq	2					Y		Tag No.
	1BKR52-10425	Eqp Id	OFF	Hang Pos	CLOSED			Restore Pos
MCC 104R BORIC ACID FD PP 1MOV514								
45' W PEN ROOM								
*MBOB MOV GROUP FOR VOTES TESTING								
Tagger/Date	N/A		Verifier/Date					





Clearance ID

1200200332

CLEARANCE COVERSHEET

System No: 041

System Description CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Reason/Comments

OVERHAUL 1MOV514OP
 VOTES TESTING
 OPS TO ENSURE OTHER BORIC ACID FLOWPATHS ARE AVAILABLE.

Clearance Preparation

Rad Con/Chem Notification Fire Protection Notification Containment Integrity FOWL	Trip Sensitive LLRT Pre-Clearance Activities	Annunciation Affected High Energy Tech Spec/TRM Standard X
Prepared by: <u>BUSKIRK, FORREST L</u>		Date/Time: <u>02/07/2002 13:48</u>
High Energy Approval <u>N/A</u>		Date/Time: <u>N/A</u>

Associated Equipment

Equipment ID	Equipment Description

1200200332



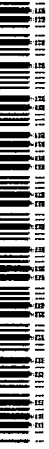


Clearance ID 1200200332
STUB INDEX

System No: 041 **System Description:** CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Stub ID	MO	RMG	Linked with Cirnc#-StubID	Issued	Returned	Stat

1200200332





Clearance ID

1200200332

CLEARANCE REFERENCES

System No 041 **System Description** CHEMICAL & VOLUME CONTROL SYSTEM (CVCS)

Associated Maintenance Orders, etc.

Maintenance Order	Job Description
-------------------	-----------------

Associated NORMS Documents

Document ID	Rev	Document ID	Rev
60730SH0001	0072		
12600-5969SH0002	0001F		
61017SH0001	0027		
12600-5968SH0001	0003		
15779-0026	0000		
61196SH0032A	0006		
61075SH0033B	0001		
61196SH0032B	0001		
12116-0005	0002		
61096SH0001	0026		

1200200332



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12/29/2003

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405



Unit: 1 IR #: 3042528 Pri: 3
UEI: 1MOV514VLV EQP SR Cls: SR System: 041

Descr: BAPP TO CHG PP SUCT DIREC

Tag Loc: 1C07

CR Tag Hung: Y

Mode: 1

----- JOB SCOPE -----

~~OVERHAUL 1MOV514VLV DUE TO LEAK BY~~ *WJL*
Steps 10, 20, 30 only

----- PROBLEM / WORK REQUESTED -----

WHILE RECIRCING THE 11 AND 12 BAST'S THE REACTOR POWER LOWERED
CONSIDERABLY. THE THERMAL OUTPUT WENT FROM 2696 MW TO 2691 MW IN TWO
HOURS. IT WOULD APPEAR THAT 1-CVC-514 IS LEAKING BY.

Initiator: DAN SLOAN

----- REQUIRED INDICATORS -----

QV Call# Req'd: N Safety Tag Req'd: Y MO Sfty Cls: SRN0
SWP: 02-1001 Dose Est: .002 Eqp OOS Dur: 10
02-1002
02-1006
02-1010
02-1016

Account #: N00401-0002 Rep Task ID: IST Req'd: YES

Repeat Trend:

ZZ RMGS VERIFIED - NO REPEAT ACTIVITIES IDENTIFIED

Freq: Freq of Time: Reptask LED: Revised LED:

----- RISK CLASSIFICATION -----

Risk Classification:

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405



RADIOLOGICAL LOW RISK

----- PERMITS -----

Type	Description	Permit #
LCO	LIMITING CONDITION OF OPERATION	TRM 15.1.3 CONSIDER
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	02-1001
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	02-1002
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	02-1006
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	02-1010
SWP	SPECIAL WORK PERMIT, RADIOLOGICAL CONTROLLED AREA	02-1016

----- PLANNER INFORMATION -----

```

#####
##                                     ##
##          NOTIFY THE RESPONSIBLE ENGINEER          ##
##          BEFORE BEGINNING WORK AND                ##
##          WHEN WORK IS COMPLETED                   ##
##                                     ##
#####

```

Lead RMG: M1 Planner: L.B. ELLIOTT X-6825 Engineer: JOHN HUBER EXT. 3805

***** BEGIN OF M1 SCOPE *****

THE SCOPE OF THIS MO IS TO OVERHAUL 1MOV514VLV AND REPACK VALVE IAW. PACK-01.

CH-1-102 CLASS (B) AND MN-1-109 ZONE (2)

LINE CLASS 3" HC-7-1019
SECTION XI CLASS II
ORIGINAL CODE B31.1

LOCATION : U-1 BAST ROOM EAST WALL 2' OFF OF FLOOR

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405



NEED INSULATION REMOVED AND HEAT TRACING.
NEED RIGGING SCAFFOLDING TO REMOVE MOV.

#####

MOV INFORMATION:
PLANNER: B. HYATT X3620

THE SCOPE OF THE MOV PORTION OF THIS MO IS TO DISCONNECT AND REMOVE
1MOV514OP TO ALLOW THE MECHANICS TO OVERHAUL THE VALVE.

1MOV514OP IS LOCATED ON THE FIVE FOOT OF THE AUX. BUILDING, IN THE BAST
ROOM ON THE EAST SIDE.

1BKR52-10425 IS LOCATED IN THE U-1 45' WEST PEN ROOM.

THE HEAT TRACING ON THE VALVE (CIRCUIT 26) MAY NEED TO BE REMOVED AS
DETERMINED BY THE MECHANICS. THE HEAT TRACE IS POWER TRACE. NO TAPE WAS
ORDERED DUE TO IT BEING UNKNOWN WETHER THE HEAT TRACE WOULD NEED TO BE
REMOVED OR NOT. THE MECH NUMBERS ARE NAY73 FOR THE ALUMINUM TAPE AND
NAY74 FOR THE GLASS TAPE, IF NEEDED.

>>>>>>>>>RIGGING SCAFFOLD PLANNERS INFORMATION<<<<<<<<<<<

DAVID KIPPLE EXT# 4624

WALKDOWN AND REVIEW THE JOB - ENSURE WORK PKG HAS ALL NECESSARY SIGNATURES
PRIOR TO STARTING ANY WORK - CONDUCT A PRE-JOB BRIEFING - BE SURE TO
INCLUDE THE*****STAR**PROGRAM*****STOP THINK ACT REVIEW.

CONTACT RAD-CON PRIOR TO ENTRY INTO THE RCA - DON'T FORGET TO READ YOUR
SWP, KNOW YOUR LIMITATIONS AND SWP JOB# - HAVE YOUR TLD AND EPD ON YOUR
PERSON BEFORE CROSSING THE "K" LINE - CHECK IN WITH LEVEL TECH BEFORE
DOING ANY WORK IN THE OVERHEAD.

JOB SCOPE: BUILD A RIGGING SCAFFOLD TO SUPPORT M1 GRP
WITH THE REMOVAL & REPLACEMENT OF THE
1-CVC-514-MOV VALVE FOR OVERHAUL.

POST THE PROPER SIGNS AND FLAGGING IN YOUR WORK AREA.

THIS RIGGING SCAFFOLD SHALL BE BUILT I.A.W. MN-1-203 PROCEDURE, ATTACHMENT
#3 FOR LOADS TO 400 LBS.

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405



THIS JOB IS LOCATED IN THE U-1 AUX BLDG, 5' LEVEL IN BAST ROOM - SEE ENCLOSED SURVEY MAP DRAWING# 2-1C FOR EXACT LOCATION.

*****IMPORTANT NOTICE*****

- 1) WEAR THE APPROPRIATE SAFETY EQUIPMENT & CLOTHING WHEN BUILDING/REMOVING THE SCAFFOLDING.
- 2) THIS IS A CONGESTED AREA, KNOW YOUR SURROUNDINGS AND WORK ACCORDINGLY.
- 3) USE THE PROPER BODY POSITIONING & LIFTING TECHNIQUES.
- 4) @ TIME OF PLANNERS WALKDOWN, THIS WAS A CONTAMINATED AREA.
- 5) THIS PORTION OF PIPING & EQUIPMENT IS SR.
- 6) PERSONNEL ENTERING THIS AREA SHOULD BE FAMILIAR WITH THE INDUSTRIAL SAFETY MANUAL CHAPTER 5 "HEAT STRESS" PRIOR TO STARTING WORK - MAKE SURE THAT A STAY TIME IS SET - WATCH FOR SIGNS OF HEAT STRESS & USE THE BUDDY SYSTEM.

A JOB SAFETY ANALYSIS CHECKLIST HAS BEEN PERFORMED PER MN-1-123 - ALL PRECAUTIONS/HAZARDS FOR THIS WORK HAVE BEEN IDENTIFIED & ARE NOTED IN THE PLANNER INFORMATION SECTION OF THE MO.

A RISK ASSESSMENT WORKSHEET HAS BEEN COMPLETED PER NO-1-117 AND WORK HAS BEEN FOUND TO BE LOW RISK TO NUCLEAR SAFETY, INDUSTRIAL SAFETY, ENVIRONMENTAL SAFETY & CORPORATE SAFETY.

THIS JOB HAS BEEN ASSESSED AS RADIOLOGICAL LOW RISK.

-----END MCC PLANNING INFORMATION-----

>>>>>>>>>INSULATION PLANNERS INFORMATION<<<<<<<<<<

DAVID KIPPLE EXT# 4624

WALKDOWN AND REVIEW JOB - ENSURE WORK PKG HAS ALL NECESSARY SIGNATURES PRIOR TO STARTING ANY WORK - CONDUCT A PRE-JOB BRIEFING AND BE SURE TO INCLUDE THE****STAR**PROGRAM****STOP-THINK-ACT-REVIEW.

CONTACT RAD-CON PRIOR TO ENTRY INTO RCA - DON'T FORGET TO READ YOUR SWP, KNOW YOUR LIMITATIONS & SWP JOB # - BE SURE TO HAVE YOUR TLD & EPD ON YOUR PERSON BEFORE CROSSING THE "K" LINE - CHECK IN WITH THE LEVEL TECH BEFORE DOING ANY WORK IN THIS AREA.

JOB SCOPE: SUPPORT M1 GROUP WITH REMOVAL/REPLACEMENT OF THE PAD

***** WORK ORDER INFORMATION COPY *****

MO #: 120002405



INSULATION ON 1-CVC-514-MOV VALVE FOR OVERHAUL.

POST THE PROPER SIGNS AND FLAGGING IN YOUR WORK AREA.

PERFORM ALL WORK I.A.W. INSUL-06 PROCEDURE & MN-1-122 IF NECESSARY.

THIS JOB IS LOCATED IN THE UNIT-1 AUX BLDG, 5'LEVEL BAST ROOM, @ EASTSIDE WALL - SEE ENCLOSED MARKED SURVEY MAP# 2-1C FOR EXACT LOCATION.

*****IMPORTANT NOTICE*****

AT TIME OF WALKDOWN, THIS WAS WITHIN THE BOUNDARIES OF A CONTAMINATED AREA.

ALL FABRICATION WORK SHOULD BE DONE PRIOR TO INSTALLING THE INSULATION - THIS IS TO PREVENT DAMAGE TO THE POWER TRACE/HEAT TRACE.

OBTAIN SUPP TAG-OUT FOR THE HEAT TRACE CIRCUIT 1-P/S-26 BEFORE REMOVING ANY INSULATION - THIS IS A HEAT SENSITIVE ROOM AND HEAT TRACE MUST BE TAGGED OUT BEFORE INSULATION CAN BE REMOVED.

THIS PORTION OF PIPING & EQUIPMENT IS SR.

PERSONNEL ENTERING THIS AREA SHOULD BE FAMILIAR WITH THE INDUSTRIAL SAFETY MANUAL CHAPTER 5 "HEAT STRESS" PRIOR TO STARTING WORK - MAKE SURE THAT A STAY TIME IS SET - WATCH FOR SIGNS OF HEAT STRESS & USE THE BUDDY SYSTEM.

WEAR THE APPROPRIATE SAFETY EQUIPMENT & CLOTHING WHEN REMOVING/INSTALLING THE INSULATION.

THIS IS A CONGESTED WORKING AREA - USE THE PROPER BODY POSITIONING & LIFTING TECHNIQUES.

A JOB SAFETY ANALYSIS CHECKLIST HAS BEEN PERFORMED PER MN-1-123 - ALL PRECAUTIONS/HAZARDS FOR THIS WORK HAVE BEEN IDENTIFIED & ARE NOTED IN THE PLANNERS INFORMATION SECTION OF THIS MO.

A RISK ASSESSMENT WORKSHEET HAS BEEN COMPLETED PER NO-1-117 AND WORK HAS BEEN FOUND TO BE LOW RISK TO NUCLEAR SAFETY, INDUSTRIAL SAFETY, ENVIRONMENTAL SAFETY & CORPORATE SAFETY.

THIS JOB HAS BEEN ASSESSED AS RADIOLOGICAL LOW RISK.

-----END OF BNI PLANNERS INFORMATION-----

*****OPS PLANNER REVIEW*****

03/06/2001 RANDY HOLT X 3556: THE REQUIRED BORATION FLOW PATH IS FROM THE RWT VIA A HIGH PRESSURE SAFETY INJECTION PUMP.

NWOR412

12/29/2003

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405



: THIS MO REMOVES EQUIPMENT FROM SERVICE,
WHICH MAY BE REQUIRED FOR SAFE SHUTDOWN OPERATION AS IDENTIFIED IAW NO-1-
103. RISK ASSESSING AND MANAGING RISK ASSOCIATED WITH THIS MO WILL BE
COVERED BY NO-1-103. CONTINGENCIES FOR REMOVING THIS EQUIPMENT FROM
SERVICE SHALL BE DETERMINED BY OUTAGE MANAGEMENT.

RADIATION PROTECTION PLANNING #####
PLANNER: B.WILEY X6706 EVALUATED AS RADIOLOGICAL LOW RISK 03/06/2001

NWOR412

12/29/2003

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405



----- JOB STEPS -----

Step: 10 Sub: 1

Craft: MMC

REVIEW PLANNERS INFORMATION: THEN ERECT A RIGGING SCAFFOLD ABOVE 1-CVC-514-MOV VALVE - THIS RIGGING SCAFFOLD IS TO BE BUILT IAW MN-1-203 ATTACHMENT# 3 FOR LOADS UP TO 400 LBS - THIS IS TO SUPPORT M1 GRP WITH REMOVAL/REPLACEMENT OF THE VALVE FOR OVERHAUL. (APPROX WEIGHT OF SMB-00 TYPE VLVS IS 225 LBS)

*****THE USER IS RESPONSIBLE FOR LOAD TESTING THE RIGGING SCAFFOLD*****

AFTER SCAFFOLD IS COMPLETE, CLEAN THE WORK AREA AND DOCUMENT ALL ACTION TAKEN IN THE WORK PKG.

Performed By:

Step: 20 Sub: 1

Craft: MOV

LOAD TEST RIGGING SCAFFOLDING IAW. MN-1-203 ATTACHMENT-3 AND MN-1-104.

LOAD TEST TO 600LBS

Performed By:

Step: 30 Sub: 1

Craft: MOV

Work Release: JOB STEP(S 30 OPS:

CHECK THE VOTES FORCE SENSOR WITH A P-3500.

IF OPERATIONS WILL ALLOW CYCLING OF THE VALVE, VERIFY THAT THERE IS AT LEAST 10 MICRO VOLTS/VOLT CHANGE WHEN LOADING AND UNLOADING THE VALVE. NOTE - THE PREFERRED USE RANGE LIMIT OF THE SENSOR IS A READING OF NO GREATER THAN 1000 MICRO VOLTS/VOLT AND NO LOWER THAN -1500 MIRCO VOLTS/VOLT.

IF THE VOTES FORCE SENSOR CHECK IS UN-SAT, THEN REPLACE THE VOTES FORCE SENSOR PER MOV-8.

Performed By:

Step: 40 Sub: 1

Craft: MOV

WORK IS ON SR AND NON EQ EQUIPMENT.

PICK UP TAGOUT AND WALK DOWN BOUNDARIES.

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405

Performed By:

Step: 50 Sub: 1

Craft: MOV

CHECK THE VOTES FORCE SENSOR WITH A P-3500.

VERIFY THAT THERE IS AT LEAST 10 MICRO VOLTS/VOLT CHANGE WHEN LOADING AND UNLOADING THE VALVE. NOTE - THE PREFERRED USE RANGE LIMIT OF THE SENSOR IS A READING OF NO GREATER THAN 1000 MICRO VOLTS/VOLT AND NO LOWER THAN - 1500 MICRO VOLTS/VOLT.

IF THE VOTES FORCE SENSOR CHECK IS UN-SAT, THEN REPLACE THE VOTES FORCE SENSOR PER MOV-8.

Performed By:

Step: 60 Sub: 1

Craft: MOV

PERFORM AS FOUND VOTES TEST ON 1MOV514OP PER MOV-9A, EXCEPT SECTION 6.2F-J.

HAVE TAGGING ROLL TAGS TO RED FOR INSULATION REMOVAL/VALVE OVERHAUL.

Performed By:

Step: 70 Sub: 1

Craft: BNI

OBTAIN SUPP TAG-OUT FOR 1-P/S-26 HEAT TRACE CIRCUIT - WALKDOWN & VERIFY TAGOUT BOUNDARIES.

Performed By:

Step: 80 Sub: 1

Craft: BNI

- 1) REVIEW THE PLANNERS INFORMATION.
- 2) OBTAIN A HEPA VACUUM PER RST DIRECTION FOR INSULATION REMOVAL.
- 3) REMOVE INSULATION FROM THE 1-CVC-514-MOV VLV & ASSOC 3" HC7-1019 LINE CLASS PIPING AS PER DIRECTION OF THE CRAFT - SEE ENCLOSED MARKED DRWG# 15779-0026 FOR REFERENCE - THIS IS TO SUPPORT M1 GRP WITH OVERHAULING THE VALVE.
- 4) AFTER INSULATION IS REMOVED, CLEAN THE WORK AREA AND DISPOSE OF ALL

NWOR412

12/29/2003

***** WORK ORDER INFORMATION COPY *****

MO #: 1200002405



TRASH IN THE PROPER MANNER - MARK, BAG AND STORE PAD INSULATION IN A SAFE LAYDOWN AREA - TAKE NECESSARY MEASUREMENTS TO FAB ANY NEW PAD INSULATION THAT NEEDS TO BE MADE - CALL PLANNER WITH MAT'L NEEDED - BE SURE TO MAKE NOTE IN ACTION TAKEN AS TO THE LOCATION WHERE OLD REUSABLE PADS ARE STORED.

5) DOCUMENT ALL ACTION TAKEN IN THE WORK PKG.

Performed By:

Step: 90 Sub: 1

Craft: EM1

REMOVE HEAT TRACING FROM 1MOV514OP BONNET AS REQUIRED. COORDINATE WITH M1 AS NECESSARY TO DETERMINE IF HEAT TRACE MUST BE REMOVED.

Performed By:

Step: 100 Sub: 1

Craft: MOV

DISCONNECT AND REMOVE 1MOV514OP PER MOV-21.

COORDINATE WITH M1 AS NECESSARY TO RIG THE ACTUATOR OFF OF THE VALVE.

Performed By:

Step: 110 Sub: 1

Craft: M1

OBTAIN TAG OUT.

Performed By:

Step: 120 Sub: 1

Craft: M1

REF. DRAWING 12600-5968 SHEET 1 AND DRAWING 12600-5969SH0002 AND REMOVE HANGER CLAMP FROM AROUND 1MOV514 AND ASSIST MOV GROUP IN REMOVING THE OPERATOR.

Performed By:

Step: 125 Sub: 1

Craft: M1

JOB STEP NOT PERFORMED BY FIELD. R&R # 2000-1-089 REQUIREMENTS.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE CP-601(NEW)**

TASK: Review and Approve a Liquid Waste Release Permit

PURPOSE: Evaluates an SRO's ability to approve a Liquid Waste Discharge Permit

**JOB PERFORMANCE MEASURE
CALVERT CLIFFS NUCLEAR POWER PLANT
LICENSED OPERATOR TRAINING**

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE CP-601 (NEW)

ELEMENT STANDARD
 (* = CRITICAL STEP)

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:

5 MINUTES

ACTUAL TIME
TO COMPLETE JPM:

_____ MINUTES

TIME CRITICAL TASK:

NO

TASK LEVEL:

TRAIN

TOOLS AND EQUIPMENT:

None

REFERENCE PROCEDURE(S):

CP-601
OI-17C-4

TASK STANDARDS:

This JPM is complete when the attached permit has been reviewed and the candidate does NOT approve the release permit.

**CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE CP-601 (NEW)**

ELEMENT	STANDARD
(* = CRITICAL STEP)	

START _____

NOTE : Provide a copy of the Liquid Waste Release Permit to the candidate

*	1.	Reviews Release Source	Determines release source is correct.
---	----	------------------------	---------------------------------------

CUE: Recirc time and date are correct and acceptable.

_____	2.	Reviews recirc start time and date	Same as element
-------	----	------------------------------------	-----------------

_____	3.	Reviews Pre-release Gamma Scan #	Same as element
-------	----	----------------------------------	-----------------

CUE: 12 RCWMT level is 31.5 feet.

*	4.	Checks Release Source Level	Verifies level in 12 RCWMT
*	5.	Reviews Discharge Point	Notes unit-1 circ.water
*	6.	Reviews Min # Circ water pumps required	Determines minimum number of circulating water pumps are NOT running on Unit-1 and notifies technician to make the permit out for Unit-2

TIME STOP _____

TERMINATING CUE: This JPM is complete when the when the CRS has identified that the RCWMT cannot be discharged with the given permit. No other action is required

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE CP-601 (NEW)

TASK: Review an Issue Report

Document below any instances of failure to 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.**

NOTES:

DID A NEAR MISS OCCUR DUE TO INAPPROPRIATE PERSONNEL ACTIONS/INACTIONS OR PROCEDURAL QUALITY? YES NO
(If yes, provide comments below)

COMMENTS:

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

SATISFACTORY

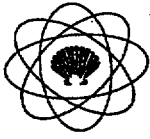
UNSATISFACTORY

EVALUATOR'S SIGNATURE: _____ **DATE:** _____

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE

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 CRO.
 - 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 is at shutdown for a refueling outage.
 - b. Amertap work is being performed in 11B, 12B and 13B waterboxes.
3. Initiating Cue: The shift Chemistry Technician has completed a Liquid Waste Release Permit for discharging 12 RCWMT. You are the Unit-1 CRS and have been requested to review and sign the permit. Are there any questions? You may begin.



LIQUID RADIOACTIVE WASTE RELEASE PERMIT

CP 601
Rev. 11
Page 62 of 68

CHEMISTRY

ATTACHMENT 2 LIQUID RADIOACTIVE WASTE BATCH RELEASE PERMIT

PERMIT #: 03-2490

Release Source: 12 RCWMT	
Recirc Start Date/Time:	Pre-Release Gamma Scan#: 310065
Release Source Level: 31.5 feet	Release Volume: 2.787E5 liters

RELEASE CRITERIA

Discharge Point: 001 U1 CIRC WATER	Min # Circ Water Pumps Required: 5
Dilution Flow Rate Pre-Release:	1.0E6 gpm
Maximum Release Flow Rate:	120 gpm
RMS Number: 0-RE-2201	(k)cpm
RMS Background: 1500	(k)cpm
Expected RMS Reading: 1741	(k)cpm
Max Setpoint: 2612	(k)cpm

APPROVAL (Release Criteria is within ODCM Requirements)

Prepared By: <i>[Signature]</i>	Compositor Setup <input checked="" type="checkbox"/> Date/Time
Compositor Setup Peer Check By: <i>[Signature]</i>	Date/Time
SPC Approval: <i>[Signature]</i>	Date/Time
Release Criteria is understood, Plant Systems are in operation, Required plant configuration for conducting release has been established.	
SM/CRS:	Date/Time
If Discharging RCWMT or MWMT, tank has been flushed thru 0-RI-2201, and response reported to Chemistry. RMS Pre-Op checks have been completed and release criteria reviewed. Correct Setpoints entered in computer and Peer Checked.	
CRO:	Date/Time

RELEASE DATA

Release Start Date/Time:	Chemistry Informed <input type="checkbox"/>	Initial Level: feet
Release End Date/Time:	Chemistry Informed <input type="checkbox"/>	Final Level: feet
RMS Reading Near Start of Discharge	(k)cpm	Time:
RMS Reading at Midpoint of Discharge	(k)cpm	Time:
RMS Reading Near End of Discharge	(k)cpm	Time:
Background Count Rate 0-RE-2201 During DI Flush		(k)cpm
# Circ Water Pps Operating During Release:	# Saltwater Pps Operating During Release:	

POST RELEASE DATA AND REVIEW

PERMIT COMPLETE. Release Criteria and Discharge Procedure Requirements Satisfied.	
CRO:	
Post Release Gamma Scan #:	Post Release Volume: liters
Post Release Dilution Flow Rate: gpm	Sample Composited (init/date):
Permit Closed Out (sign/date):	SPC Approval/Date:

**INFORMATION / TRAINING
PURPOSES ONLY**

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE ERPIP-3-4MOD

SYSTEM: Emergency Response Plan Implementation Procedures

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

PURPOSE: Evaluates an Operator's Ability to Determine that a General Emergency Exists, Make the Protective Action Recommendation, Complete the Initial Notification Form, and Notify On-Site Personnel

JOB PERFORMANCE MEASURE

CALVERT CLIFFS NUCLEAR POWER PLANT

LICENSED OPERATOR TRAINING

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ERPIP-3-4MOD

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

PERFORMER'S NAME: _____

APPLICABILITY:

RO and SRO

PREREQUISITES:

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

EVALUATION LOCATION:

PLANT SIMULATOR CONTROL ROOM

EVALUATION METHOD:

ACTUAL PERFORMANCE DEMONSTRATE PERFORMANCE

ESTIMATED TIME
TO COMPLETE JPM:

10 MINUTES

ACTUAL TIME
TO COMPLETE JPM:

____ 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 (as needed)

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

JOB PERFORMANCE MEASURE ERPIP-3-4MOD

ELEMENT	STANDARD
(* = CRITICAL STEP)	
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. (<u>Fuel Clad Barrier</u> -Radiation, coolant activity greater than 600 μ ci/cc DEQ I-131, <u>RCS Barrier</u> -Safety Function Status/Functional Recovery, EOP-8 implemented from EOP-6, <u>Cntmt Barrier</u> -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
JOB PERFORMANCE MEASURE ERPIP-3-4MOD

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, General Emergency Actions, is applicable. |
|-------|---|--|

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

Note to Evaluator: Your copy of Att. 3 is on page 10 of this JPM.

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 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.

- | | | |
|-------|--|---|
| _____ | b. Item 8, Radioactivity:

Has Not Been Released | Checks "Is Being Released From the Plant" |
|-------|--|---|

Is Being Released From the Plant
 In the Plant

Has Been Released From the Plant
 In the Plant

- | | | |
|-------|---|---------------|
| _____ | c. Item 10, Population Affected: | Checks "YES". |
|-------|---|---------------|

CCNPP LICENSED OPERATOR

JOB PERFORMANCE MEASURE ERPIP-3-4MOD

ELEMENT	STANDARD
(* = CRITICAL STEP)	

_____ 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.

_____ 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:	Determines step is N/A.
-----------	--	-------------------------

"Shelter entire 10 mile EPZ"

NOTE: Page 2 of this attachment may be used to determine which protective action zones (PAZ's) are affected.

CUE: When DRDT screen checked, DIR10 and DIR60 are 120°.

* _____ 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."	Determines that this step is applicable. Selects PAZ 1 and 2 based on down wind sector using Att. 5, page 2 of 2.
-------------	--	--

CCNPP LICENSED OPERATOR
JOB PERFORMANCE MEASURE ERPIP-3-4MOD

ELEMENT (* = CRITICAL STEP)	STANDARD
--------------------------------	----------

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" 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 6.	Enter "Time" and "Date".
___	5.	Complete Item 7.	Enters EAL code BG1 and circles EAL number NA, and two digit Event Code 59 in Item 7.
*	6.	Complete Item 8.	Checks "Is Being Released" and "From the Plant".
*	7.	Complete Item 9.	Checks "Airborne".
*	8.	Complete Item 10.	Checks "YES" in Item 10.
*	9.	Complete Item 11.	Checks evacuate PAZ 1& 2 unless conditions make evacuation dangerous, and shelter remainder of 10 miles EPZ.
___	10.	Complete Item 12.	Circles "is" in Item 12.
___	11.	Complete Item 13.	Writes printed name and signature.
___	12.	Complete Item 14.	Circles SM.
___	13.	Completes Item 15, gives for to communicator.	Same as Element.

TIME STOP _____

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

CCNPP LICENSED OPERATOR

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 $\mu\text{ci/cc}$ 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.



ERPIP

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 4, GENERAL EMERGENCY ACTIONS

Page 1 of 4

ACTIONS FOR SHIFT MANAGER

COMPLETE THE INITIAL NOTIFICATION FORM

1.0 COMPLETE Attachment 3, Initial Notification Form, as follows (items not mentioned are self-explanatory).

a. 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.

b. 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.

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

d. Item 11, Protective Actions
Recommended: select a protective action from Attachment 5, General Emergency Protective Action Recommendations.



ERPIP

ATTACHMENT 4, GENERAL EMERGENCY ACTIONS

Page 2 of 4

ACTIONS FOR SHIFT MANAGER

B. RECALL THE EMERGENCY RESPONSE ORGANIZATION

WARNING

Take into consideration the nature of the emergency (e.g., Security Events, Severe Weather) in determining if the ERO can be recalled to normal Emergency Response Facilities and coordinate with Security to direct the ERO to alternate locations as needed. [B-10]

1.0 IF the Emergency Response Organization has been recalled AND is in place, THEN GO TO Step F. ESTABLISH CONTROL ROOM ACCOUNTABILITY, of this attachment.

1.1 IF the Emergency Response Organization has not been recalled, THEN DIRECT the Control Room Communicator to recall the Emergency Response Organization according to ERPIP-105, Control Room Communicator, personnel notification.

03-0209

C. NOTIFY ONSITE PERSONNEL

1.0 DIRECT the Control Room Communicator to perform the following:
a. SOUND the emergency PA alarm for 5 seconds.

WARNING

Take into consideration the nature of the emergency (e.g., Security Events, Severe Weather) in determining if assembly announcements are appropriate [B-10]

b. ANNOUNCE "A GENERAL EMERGENCY exists." Give EAL category. IF site assembly has not been done, THEN ANNOUNCE "All personnel report to your assembly area immediately."
c. REPEAT Steps C.1.0.a. and C.1.0.b. of this attachment once.

D. 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.

03-0209



IMMEDIATE ACTIONS

ERPIP-3.0
Revision 3.1
Page 16 of 95

ERPIP

ATTACHMENT 3, INITIAL NOTIFICATION FORM

USE THIS FORM FOR INITIAL NOTIFICATION AND EMERGENCY CLASS
UPGRADING AND DOWNGRADING ONLY

Form instructions are on back

A. COMPLETE ITEMS 1 THROUGH 15

1	This ESI is not an exercise (circle one)	8	Radioactivity: <input type="checkbox"/> Has Not Been Released <input type="checkbox"/> Is Being Released <input type="checkbox"/> Has Been Released
2	Caller's Name		<input type="checkbox"/> From the Plant <input type="checkbox"/> In the Plant
3	Title/Organization: CONPP		<input type="checkbox"/> From the Plant <input type="checkbox"/> In the Plant
4	Facility: Calvert Cliffs Nuclear Power Plant		
5	Emergency Class: <input type="checkbox"/> None <input type="checkbox"/> Unusual Event <input type="checkbox"/> Alert <input type="checkbox"/> Site Emergency <input type="checkbox"/> General Emergency	9	Type of Release: <input type="checkbox"/> None <input type="checkbox"/> Airborne <input type="checkbox"/> Waterborne <input type="checkbox"/> Surface Spill
6	Time Declared: _____ Date	10	Population Affected: <input type="checkbox"/> None <input type="checkbox"/> Yes
7	Nature of Incident: <input type="checkbox"/> None Emergency Code: _____ Circle EAL Number: N/A 1 2 3 4 5 6 Enter two digit event code: _____	11	Protective Action Recommended (Choose one only): <input type="checkbox"/> None <input type="checkbox"/> Shelter entire 10 mile EPZ <input type="checkbox"/> Evacuate PAZ 1 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ <input type="checkbox"/> Evacuate PAZ 1 & 3 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ <input type="checkbox"/> Evacuate PAZ 1, 2 & 3 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ <input type="checkbox"/> Evacuate PAZ 1 & 2 unless conditions make evacuation dangerous and shelter remainder of the 10 mile EPZ
		12	This ESI is not an exercise (circle one)

Printed Name & Signature _____
Initial Notification completed by (circle one): SM PGM CSNO SEC
GIVE form to Communicator

B. COMMUNICATOR COMPLETE ITEMS 1 THROUGH 4

1. NOTIFY agencies a through 3 below. GIVE items 1 through 12 above in order. Use conference feature on dedicated phone. IF conferencing feature is not available, THEN use (in order of preference): back-up (B/U) conference button on dedicated phone, individual buttons on dedicated phone, OR any outside line phone, OR radio.

2. LOG time and name of receiving communicator and indicate the method used to transmit notification.

NOTE

During off hours, Maryland Emergency Management Agency (MEMA) and Maryland Department of the Environment (MDE) emergency centers are not staffed. Phone will not be answered. Maryland State Police (MSP) receives calls for MEMA off hours. MSP then notifies MEMA. MEMA will forward information to MDE until offices are manned.

	LOCATION	TIME	RECEIVED BY	DEDICATED PHONE	RADIO	OUTSIDE LINE
a	CALVERT					(410-535-3491)
b	ST. MARYS					(301-475-8016)
c	DORCHESTER					(410-228-2222)
d	MEMA (or MSP)					(410-517-3600)
e	MDE (MEMA or MSP)					(410-537-3975)
f	NRC					(301-816-5100)

3. RECORD time all calls to above agencies were completed.

4. _____
Printed Name & Signature

FORWARD completed forms to Emergency Preparedness at event termination.



ATTACHMENT 3. INITIAL NOTIFICATION FORM

FORM INSTRUCTIONS

Page 2 of 2

1. Site Emergency Coordinator (or designee) completes items 1 through 12.
Items not mentioned are self-explanatory.
 - a. Item 7: RETRIEVE this information from the EALs chart in ERPIP 3.0 Immediate Actions, Attachment 1, Emergency Action Level (EAL) Criteria.
IF "None" (no emergency) is checked in Item 5, THEN CHECK "None" after "Nature of Incident".
 - b. Item 10: IF General Emergency is checked in Item 5, THEN CHECK "Yes" (in Item 10, Population Affected).
IF General Emergency is not checked in Item 5, THEN CHECK "NONE" (in Item 10, Population Affected).
 - c. Item 11: IF General Emergency is checked in Item 5, THEN DETERMINE appropriate Protective Action Recommendation and downwind zone(s) from ERPIP 3.0 Attachment 5, General Emergency Protective Action Recommendations, AND CHECK corresponding box (check one box only).
IF General Emergency is not checked in Item 5, THEN CHECK "NONE" (in Item 10, Population Affected).
 - d. Site Emergency Coordinator must sign form after Items 1 through 12 have been completed.
2. Communicator:
 - a. Provide the information in Items 1 through 12 from the top of the form to the agencies listed in the table provided on the form.
 - b. Notify agencies 1 through 5 first (these are the State and local agencies).
Communication priorities are:
 - (1) Conference button on Dedicated Offsite Agency phone.
 - (2) B/U (back-up) conference button on Dedicated Offsite Agency phone.
 - (3) Individual agency buttons on Dedicated Offsite Agency phone.
 - (4) Any telephone.
 - (5) The radio.
 - c. Record time that agency answers and answering parties name. Check which method was used to transmit the notification.
 - d. Communicator must sign form after completing notifications.



ATTACHMENT 5, GENERAL EMERGENCY PROTECTIVE ACTION RECOMMENDATIONS

Page 1 of 2

A.1. SELECT A PROTECTIVE ACTION RECOMMENDATION

NOTE

A protective action recommendation shall 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

